

10/001,741

Access DB#

102676

10/13

# SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Callie Shusho Examiner #:                      Date: 8/18/03  
Art Unit: 1714 Phone Number 305-0208 Serial Number: 10/001,741  
Mail Box and Bldg/Room Location: C P3-4001 Results Format Preferred (circle) PAPER DISK E-MAIL  
(mail box)

If more than one search is submitted, please prioritize searches in order of need.

\*\*\*\*\*  
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Photoprotective and Lightfastness-enhancing Silicon

Inventors (please provide full names): Thomas W Smith  
Katuleen m. mcGrane

Earliest Priority Filing Date: 0000 11/15/01

\*For Sequence Searches Only\* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Can you please find the lightfastness agent of claim 1?

The hydrophilic moiety is described in claims 14-16

Lightfastness moiety for formula I in claims 2-4

" " " " II, V in claims 5-10  
" " " " III, IV in claims 11-13

## STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>Korina BM</u>	NA Sequence (#) <u>                    </u>	STN <u>✓</u>
Searcher Phone #: <u>305 3542</u>	AA Sequence (#) <u>                    </u>	Dialog <u>                    </u>
Searcher Location: <u>ELC 1700</u>	Structure (#) <u>✓</u>	Questel/Orbit <u>                    </u>
Date Searcher Picked Up: <u>8/28/03</u>	Bibliographic <u>                    </u>	Dr.Link <u>                    </u>
Date Completed: <u>8/29/03</u>	Litigation <u>                    </u>	Lexis/Nexis <u>                    </u>
Searcher Prep & Review Time: <u>2 min</u>	Fulltext <u>                    </u>	Sequence Systems <u>                    </u>
Clerical Prep Time: <u>                    </u>	Patent Family <u>                    </u>	WWW/Internet <u>                    </u>
Online Time: <u>3h</u>	Other <u>                    </u>	Other (specify) <u>                    </u>

Page 1Shosho741

10/001-741

=> file reg

FILE 'REGISTRY' ENTERED AT 10:36:14 ON 29 AUG 2003  
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Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 27 AUG 2003 HIGHEST RN 574700-05-3  
DICTIONARY FILE UPDATES: 27 AUG 2003 HIGHEST RN 574700-05-3

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP  
PROPERTIES for more information. See STNote 27, Searching Properties  
in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> file caplus

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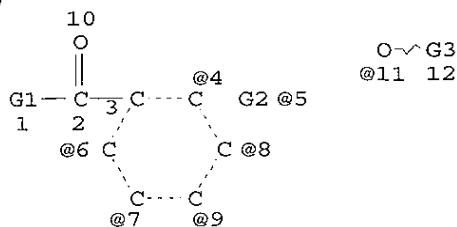
FILE COVERS 1907 - 29 Aug 2003 VOL 139 ISS 10  
FILE LAST UPDATED: 28 Aug 2003 (20030828/ED)

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

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L1 STR

KOROMA EIC1700



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VAR G2=OH/11
VAR G3=AK/CB
VPA 5-4/8/9/7/6 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT LLEVEL IS LIMITED
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GRAPH ATTRIBUTES:
RSPEC I
NUMBER OF NODES IS 12

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STEREO ATTRIBUTES: NONE

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L3          SCR 117
L4          SCR 483
L5          SCR 471
L6          SCR 1700
L7          SCR 180
L8          SCR 1510
L9          SCR 1841
L10         SCR 1918
L11         SCR 2005
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L14         23421 SEA FILE=REGISTRY ABB=ON PLU=ON 46.492.16/RID AND 2/NR
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L16         1 SEA FILE=REGISTRY ABB=ON PLU=ON 562084-83-7
L17         1 SEA FILE=REGISTRY ABB=ON PLU=ON 13282-45-6
L18         1 SEA FILE=REGISTRY ABB=ON PLU=ON 562084-82-6
L19         1 SEA FILE=REGISTRY ABB=ON PLU=ON 2549-87-3
L20         1 SEA FILE=REGISTRY ABB=ON PLU=ON 562084-80-4
L21         1 SEA FILE=REGISTRY ABB=ON PLU=ON 171483-98-0
L24         1 SEA FILE=CAPLUS ABB=ON PLU=ON L18
L27         35 SEA FILE=CAPLUS ABB=ON PLU=ON L21
L32         15996 SEA FILE=CAPLUS ABB=ON PLU=ON (L15 OR L16 OR L17 OR L19 OR
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                ? OR RADIANCE OR GLOW OR BEAM OR PHOTOSENSI? OR LIGHT SENSITIV?
                OR COLORANT?)
L33         12567 SEA FILE=CAPLUS ABB=ON PLU=ON (L15 OR L16 OR L17 OR L19 OR

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KOROMA EIC1700

L20) AND (INK? OR INK(3A)COMPOS? OR COLOR? OR DYE? OR STAIN?)  
L34 23928 SEA FILE=CAPLUS ABB=ON PLU=ON L32 OR L33  
L39 12654 SEA FILE=CAPLUS ABB=ON PLU=ON (L15 OR L16 OR L17 OR L19 OR  
L20) AND (INK? OR INK(3A)COMPOS? OR LIGHTFAST? OR COLOR? OR  
DYE? OR STAIN?)  
L40 23960 SEA FILE=CAPLUS ABB=ON PLU=ON L39 OR L34  
L41 2 SEA FILE=CAPLUS ABB=ON PLU=ON (L24 OR L27) AND L40  
L43 847 SEA FILE=CAPLUS ABB=ON PLU=ON L40 AND (?SILOXANE? AND  
?POLYMER?)  
L44 67 SEA FILE=CAPLUS ABB=ON PLU=ON L43 AND INK?  
L45 68 SEA FILE=CAPLUS ABB=ON PLU=ON L44 OR L41

=> d ti 1-68 l45

L45 ANSWER 1 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Laminating film and its use in laminated ink-jet printed  
material and lamination method

L45 ANSWER 2 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI UV stabilizers and UV stabilized thermoplastic compositions obtained  
therefrom

L45 ANSWER 3 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Photoprotective and lightfastness-enhancing siloxanes and  
cosmetic composition

L45 ANSWER 4 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Ink-jet printing sheet containing silicone surfactant, printed  
material, and their application

L45 ANSWER 5 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Ink-jet printing sheet containing silicone surfactant, printed  
material, and their application

L45 ANSWER 6 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Ink jet printing sheet containing silicone surfactant, printed  
material, and their application

L45 ANSWER 7 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Recording sheets with lightfastness-enhancing siloxanes

L45 ANSWER 8 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Production of liposomes coated with polyhydroxyalkanoate

L45 ANSWER 9 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Particulate construct comprising polyhydroxyalkanoate and method for  
producing it

L45 ANSWER 10 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Uv-sensitive marking composition for temporarily visible mark

- L45 ANSWER 11 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Thermal transfer protective sheets with good water absorption, and thermal-transfer-printed matters protected with them
- L45 ANSWER 12 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI One-component photocurable resist composition for electronic parts
- L45 ANSWER 13 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Recording method and apparatus using **ink composition** and its reactive solution and records formed by them
- L45 ANSWER 14 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Protective layer transfer sheet with good fastness properties to an image in a print
- L45 ANSWER 15 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Ink** jet printing paper
- L45 ANSWER 16 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Ink**-jet recording medium with porous structure and image fastness-improving method
- L45 ANSWER 17 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Bis(alkyleneoxybenzophenone) ultraviolet **light** absorbers for plastics
- L45 ANSWER 18 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Metalized film, method for the production thereof, and its use especially for radio frequency antennas or transponders
- L45 ANSWER 19 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Emulsion composition for protective layer on printed product, protective sheet using the composition, and method for protecting surface of printed product
- L45 ANSWER 20 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Benzotriazole UV absorber-coated decorative materials with excellent weather resistance
- L45 ANSWER 21 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Organic solvent compositions in wet transfer process and process of transfer films for exterior materials
- L45 ANSWER 22 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics
- L45 ANSWER 23 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Water-resistant **ink**-jet printing **ink compositions** and **ink**-jet recording device for using them
- L45 ANSWER 24 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Flexible laminated sheets with embossed patterns and their manufacture

- L45 ANSWER 25 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Liquid crystalline substance mixtures
- L45 ANSWER 26 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Stir-in pigment compositions for coloring high-molecular weight materials
- L45 ANSWER 27 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Dyed UV-absorbing polymer particles and light-resistant water-based inks containing them
- L45 ANSWER 28 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Weather- and scratch-resistant decorative polyolefin-type sheets for construction materials
- L45 ANSWER 29 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Weather- and scratch-resistant decorative polyolefin-type sheets for construction materials
- L45 ANSWER 30 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Water-washable antisoiling coatings containing multibranched polymers
- L45 ANSWER 31 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Image-enhancing composition for imaging and printing materials
- L45 ANSWER 32 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Transparent plastic laminates having shielding layer
- L45 ANSWER 33 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Trisaryl-1,3,5-triazine ultraviolet light absorbers containing hindered phenols
- L45 ANSWER 34 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Reusable recording materials having heat-resistant and peelable polymer coatings
- L45 ANSWER 35 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Water-thinned marking pen inks giving images easily erasable by wiping with paper or cloths for writing boards
- L45 ANSWER 36 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Coating compositions and formation of cured films therefrom
- L45 ANSWER 37 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Laminatable backing substrates containing paper desizing agents for simulated photographic-quality prints
- L45 ANSWER 38 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Coated papers with hydrophobic barrier layers and image receiving coatings

- L45 ANSWER 39 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Water-repellent and light-resistant aqueous ink-jet ink compositions
- L45 ANSWER 40 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Ink-jet printing receptor containing silicone oil and ultraviolet absorbent
- L45 ANSWER 41 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Energy ray-curable printing ink compositions for cans and their coating method
- L45 ANSWER 42 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Thermal recording body
- L45 ANSWER 43 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Stain- and impact-resistant coating compositions for metal plates
- L45 ANSWER 44 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Thermal transfer sheet with excellent antiblocking characteristics
- L45 ANSWER 45 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Thermal transfer recording media with antisticking layer
- L45 ANSWER 46 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Preparation and use of liquid crystalline pigments whose reflected color depends on the observation angle
- L45 ANSWER 47 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Magnetic inks
- L45 ANSWER 48 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Method for enhancing image-density
- L45 ANSWER 49 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Thermal-transfer media
- L45 ANSWER 50 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Thermal transfer recording media with heat-resistant protective layer
- L45 ANSWER 51 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Thermal transfer printing inks and receptors
- L45 ANSWER 52 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Durable image-bearing thermal-transfer receptor and its manufacture
- L45 ANSWER 53 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Thermal transfer recording sheet with lubricating layer
- L45 ANSWER 54 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Permanently luminous printing ink and its usage

L45 ANSWER 55 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Sublimation dispersion **dye** receptive resin compositions for thermal receiving sheets for thermal printing

L45 ANSWER 56 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Nonaqueous **inks** for jet printing on heat-resistant substrates

L45 ANSWER 57 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Thermal-transfer printer ribbons

L45 ANSWER 58 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Waterless presensitized lithographic plates with **photosensitive** layer containing **polymer** having **polyorgaosiloxane** units

L45 ANSWER 59 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Positive-working waterless lithographic plates comprising a **photosensitive** layer and a silicone rubber layer

L45 ANSWER 60 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Dispersing agents for solid particles in organic compounds

L45 ANSWER 61 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI **Light-sensitive** printing plate for dry lithographic printing

L45 ANSWER 62 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Waterless lithographic original plates with a **photosensitive** layer containing acrylic acid derivative **copolymers**

L45 ANSWER 63 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Thermal-transfer printing sheet with heat-resistant protective back layer

L45 ANSWER 64 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Presensitized printing plate and method for preparing a printing plate for waterless lithography

L45 ANSWER 65 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Pressure-sensitive transfer material

L45 ANSWER 66 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Latex-coated resin microspheres

L45 ANSWER 67 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Original plate for dampening water-free lithography and process for making printing plates using it

L45 ANSWER 68 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
TI Driographic printing plate



=> d ibib abs hitstr ind total 145

L45 ANSWER 1 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2003:644325 CAPLUS  
 TITLE: Laminating film and its use in laminated ink  
 -jet printed material and lamination method  
 INVENTOR(S): Tsukamoto, Masami; Iwata, Satoshi; Kunimine, Noboru  
 PATENT ASSIGNEE(S): Canon Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003231217	A2	20030819	JP 2002-28514	20020205
PRIORITY APPLN. INFO.:			JP 2002-28514	20020205

AB The film with high blocking resistance in wound state and laminating the ink-jet printed surface without wrinkling, consists of a heat-resistant support and a releasable transparent film layer for lamination on the printed surface, wherein the transparent film layer has (1) a primary layer placed on the support for the printed surface protection and (2) a secondary polysiloxane- and spherical bead-contg. layer as an adhesive for the printed surface. Thus, a poly(ethylene terephthalate) film was coated with PUVA 30M (UV-absorbing polymer), dried, coated with a mixt. contg. 2 kinds of Et acrylate-2-hydroxyethyl methacrylate-methacrylic acid-Me methacrylate copolymer emulsions, Chemisnow MR 20G (acrylic polymer bead), and BYK 333 (polyether-modified polydimethylsiloxane), and dried to give a film showing no blocking in wound state. An ink-jet printing medium having a silica receptor layer was laminated with the film without damaging printed surface.

IT INDEXING IN PROGRESS

IT 153175-43-0, PUVA 30M

RL: TEM (Technical or engineered material use); USES (Uses)  
 (surface protection layer; transparent laminating film having adhesive layer and surface protection layer releasable from support for lamination on ink-jet printed material)

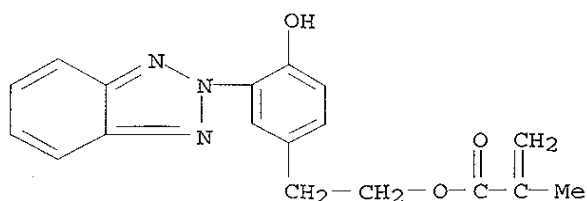
RN 153175-43-0 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with methyl 2-methyl-2-propenoate (9CI)  
 (CA INDEX NAME)

CM 1

CRN 96478-09-0

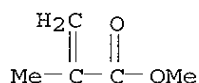
CMF C18 H17 N3 O3



CM 2

CRN 80-62-6

CMF C5 H8 O2



IC ICM B32B027-00

ICS B41M005-00; C08K007-16; C08L083-04

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 74

ST lamination **ink** jet printed surface transparent film; adhesive surface protection layer lamination printed matter; acrylic **polymer** bead **polysiloxane** adhesive laminating film

IT Acrylic **polymers**

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(bead, adhesive layer contg.; transparent laminating film having adhesive layer and surface protection layer releasable from support for lamination on **ink-jet** printed material)

IT **Polysiloxanes**

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(di-Me, hydroxy-terminated, ethoxylated propoxylated, BYK 333, adhesive layer contg.; transparent laminating film having adhesive layer and surface protection layer releasable from support for lamination on **ink-jet** printed material)

IT Adhesive films

Ink-jet recording sheets

Lamination

Release films

(transparent laminating film having adhesive layer and surface protection layer releasable from support for lamination on **ink-jet** printed material)

IT Laminated plastics

RL: TEM (Technical or engineered material use); USES (Uses)

(transparent laminating film having adhesive layer and surface

KOROMA EIC1700

protection layer releasable from support for lamination on ink-jet printed material)

IT 26915-97-9P, Ethyl acrylate-2-hydroxyethyl methacrylate-methacrylic acidmethyl methacrylate copolymer  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (adhesive layer contg.; transparent laminating film having adhesive layer and surface protection layer releasable from support for lamination on ink-jet printed material)

IT 25038-59-9, Poly(ethylene terephthalate)  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (film support; transparent laminating film having adhesive layer and surface protection layer releasable from support for lamination on ink-jet printed material)

IT 153175-43-0, PUVA 30M  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (surface protection layer; transparent laminating film having adhesive layer and surface protection layer releasable from support for lamination on ink-jet printed material)

L45 ANSWER 2 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:571055 CAPLUS

DOCUMENT NUMBER: 139:134313

TITLE: UV stabilizers and UV stabilized thermoplastic compositions obtained therefrom

INVENTOR(S): Stretanski, Joseph A.; Sanders, Brent M.

PATENT ASSIGNEE(S): Cytec Technology Corp., USA

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003060001	A2	20030724	WO 2002-US39493	20021211
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

US 2003162868 A1 20030828 US 2002-315584 20021210

PRIORITY APPLN. INFO.: US 2001-343681P P 20011227

AB Invented UV stabilizing additive compn. is composed of 0.01-1 wt.% ortho-hydroxy triazine compds., such as 2,4,6-tris(2-hydroxy-4-octylphenyl)-1,3,5-triazine, 0.1-1.0 w.% hindered hydroxybenzoates, such

as 2,4-di-t-butylphenyl-3,5-di-t-butyl-4-hydroxybenzoate, and, optionally, 0.1-1 wt.% hindered amines, such as 1-octadecyl-1H-pyrrole-2,5-dione-(1-methylethenyl)benzene-1-(2,2,6,6-tetramethyl-4-piperidiny)-1H-pyrrole-2,5-dione copolymer. Thermoplastic material, such as polyester, polyolefin, polyurethane, polyamides, polyacrylates, and etc., can be stabilized by contacting the material with the above UV stabilizing additive compn. Thus, 3,5-di-t-butyl-4-hydroxybenzoic acid hexadecyl ester (Cyasorb UV 2908) 0.32 wt.% were mixed with polypropylene (PH 350) and antioxidants to receive the an UV stabilized compn.

IT 4221-80-1 15188-12-2 35074-76-1

66130-81-2 67845-93-6, Cyasorb UV 2908

332345-77-4 474043-40-8 562107-99-7

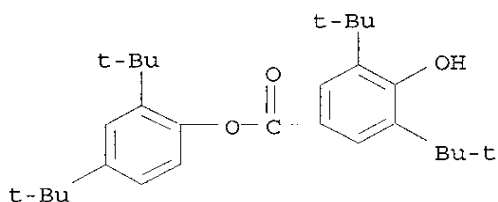
562108-00-3

RL: MOA (Modifier or additive use); USES (Uses)

(UV stabilizers and UV stabilized thermoplastic compns.)

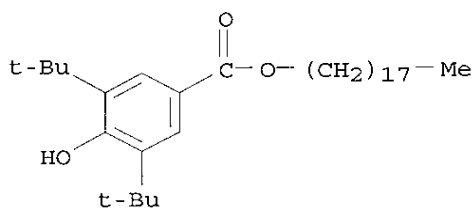
RN 4221-80-1 CAPLUS

CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, 2,4-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



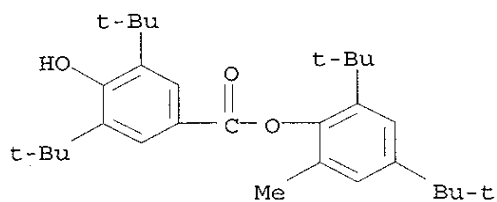
RN 15188-12-2 CAPLUS

CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, octadecyl ester (9CI) (CA INDEX NAME)



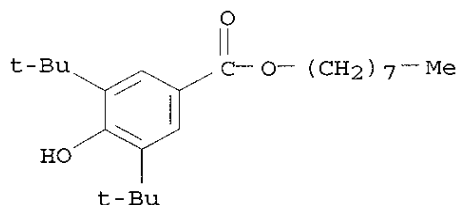
RN 35074-76-1 CAPLUS

CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, 2,4-bis(1,1-dimethylethyl)-6-methylphenyl ester (9CI) (CA INDEX NAME)



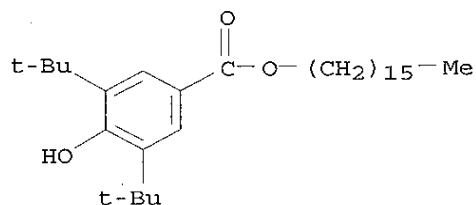
RN 66130-81-2 CAPLUS

CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, octyl ester (9CI)  
(CA INDEX NAME)



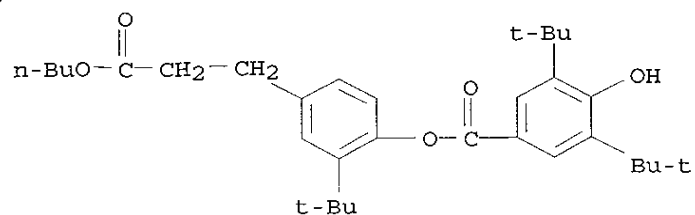
RN 67845-93-6 CAPLUS

CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, hexadecyl ester (9CI)  
(CA INDEX NAME)



RN 332345-77-4 CAPLUS

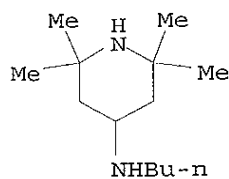
CN Benzenepropanoic acid, 4-[[3,5-bis(1,1-dimethylethyl)-4-hydroxybenzoyl]oxy]-3-(1,1-dimethylethyl)-, butyl ester (9CI) (CA INDEX NAME)



RN 474043-40-8 CAPLUS  
 CN 1,3-Propanediamine, N,N''-1,2-ethanediylbis-, polymer with  
 N-butyl-2,2,6,6-tetramethyl-4-piperidinamine and 2,4,6-trichloro-1,3,5-  
 triazine (9CI) (CA INDEX NAME)

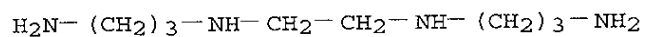
CM 1

CRN 36177-92-1  
 CMF C13 H28 N2



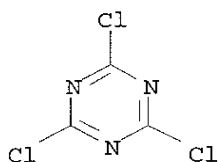
CM 2

CRN 10563-26-5  
 CMF C8 H22 N4

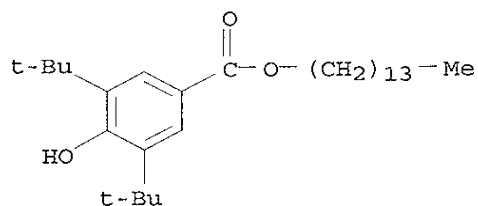


CM 3

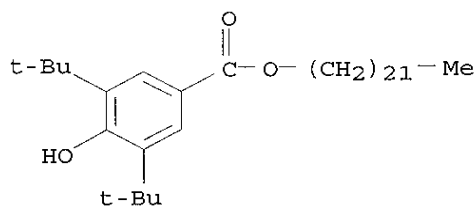
CRN 108-77-0  
 CMF C3 C13 N3



RN 562107-99-7 CAPLUS  
CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, tetradecyl ester  
(9CI) (CA INDEX NAME)



RN 562108-00-3 CAPLUS  
CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, docosyl ester (9CI)  
(CA INDEX NAME)



IC ICM C08K005-3492  
ICS C08K005-134; C08K005-3435; C08L023-02  
CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 38  
ST hydroxyaryltriazine hindered hydroxybenzoate amine UV stabilizer  
thermoplastic compn; polypropylene hexadecyl dibutylhydroxybenzoate UV  
stabilized thermoplastic compn  
IT Cosmetics  
Inks  
Paper  
Photographic films  
UV stabilizers  
(UV stabilizers and UV stabilized thermoplastic compns.)  
IT Amines, uses  
Fibers

KOROMA EIC1700

Isocyanates

Waxes

RL: MOA (Modifier or additive use); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Acrylic **polymers**, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Alkyd resins

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Aminoplasts

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Epoxy resins, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Natural rubber, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Phenolic resins, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyamides, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Polycarbonates, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyesters, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyethers, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyimides, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyketones

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyoxymethylenes, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyoxyphenylenes

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT **Polysiloxanes**, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)

IT Polysulfones, uses

RL: POF (Polymer in formulation); USES (Uses)  
(UV stabilizers and UV stabilized thermoplastic compns.)



IT Polythiophenylenes  
 RL: POF (Polymer in formulation); USES (Uses)  
 (UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyurethanes, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (UV stabilizers and UV stabilized thermoplastic compns.)

IT Synthetic rubber, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyesters, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (acrylic-polyurethane-; UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyesters, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (epoxy; UV stabilizers and UV stabilized thermoplastic compns.)

IT Imines  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (ketimines; UV stabilizers and UV stabilized thermoplastic compns.)

IT **Dyes**  
 (org.; UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyimides, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (polyamide-; UV stabilizers and UV stabilized thermoplastic compns.)

IT Acrylic polymers, uses  
 Epoxy resins, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (polyester-; UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyimides, uses  
 Polysulfones, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (polyether-; UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyamides, uses  
 Polyethers, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (polyimide-; UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyethers, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (polysulfone-; UV stabilizers and UV stabilized thermoplastic compns.)

IT Polyolefins  
 RL: POF (Polymer in formulation); USES (Uses)  
 (thermoplastic; UV stabilizers and UV stabilized thermoplastic compns.)

IT 9003-07-0, Polypropylene  
 RL: POF (Polymer in formulation); USES (Uses)  
 (PH 350; UV stabilizers and UV stabilized thermoplastic compns.)

IT 463-77-4, Carbamic acid, uses 1668-53-7 2725-22-6, Cyasorb UV 1164  
 4221-80-1 13681-75-9 15188-12-2 35074-76-1  
 40075-75-0 42774-15-2 62782-03-0 64022-57-7 64022-61-3  
 64337-97-9 64338-16-5 66130-81-2 67845-93-6, Cyasorb  
 UV 2908 70198-29-7 72058-42-5 73754-27-5 76505-58-3 79720-19-7  
 82451-48-7 82537-67-5 83733-27-1 84214-94-8 85099-50-9  
 85099-51-0 87925-52-8 91613-20-6 91613-21-7 91788-83-9

96204-36-3 99473-08-2 104564-32-1 106556-36-9 106917-30-0  
 106917-31-1 109423-00-9 110843-97-5 110843-98-6 114679-28-6  
 122035-71-6 122586-52-1 122586-95-2 124172-53-8 130277-45-1  
 131290-55-6 134016-70-9 137658-77-6 137759-38-7 138968-35-1  
 144757-53-9 145849-89-4, Cyasorb UV 3529 147315-50-2 148236-55-9  
 150686-79-6 154825-62-4 162068-65-7 162068-70-4 168921-81-1  
 173043-43-1 178905-31-2 178905-32-3 214692-65-6 219991-91-0  
 248606-47-5, Tinuvin 791 332345-77-4 372092-37-0 468772-66-9  
 474043-38-4 474043-40-8 474043-42-0 474043-43-1  
 475672-75-4 562107-99-7 562108-00-3 566135-26-0D,  
 polymer with mixed C20 to C24 alpha-olefins 566135-27-1  
 566135-28-2 566135-30-6 566135-31-7 566135-32-8 566135-33-9  
 RL: MOA (Modifier or additive use); USES (Uses)

(UV stabilizers and UV stabilized thermoplastic compns.)

IT 9002-86-2, Polyvinylchloride 9003-08-1 9003-17-2, Polybutadiene  
 9003-27-4, Isobutylene homopolymer 9003-29-6, Butene  
 homopolymer 9003-31-0, Isoprene homopolymer  
 9003-35-4 9003-53-6, Polystyrene 9003-54-7, Acrylonitrile-styrene  
 copolymer 9003-56-9, Acrylonitrile-butadiene-styrene  
 copolymer 9004-34-6D, Cellulose, polymers 9004-36-8,  
 Cellulose acetate butyrate 9011-05-6 9016-80-2, Methylpentene  
 homopolymer 9065-92-3, Octene homopolymer  
 25014-41-9, Polyacrylonitrile 25038-76-0, Norbornene homopolymer  
 25038-78-2, Dicyclopentadiene homopolymer 33638-10-7  
 50981-41-4, Hexene homopolymer 67290-43-1, Heptene  
 homopolymer 143248-85-5, Hexadiene homopolymer  
 RL: POF (Polymer in formulation); USES (Uses)  
 (UV stabilizers and UV stabilized thermoplastic compns.)

L45 ANSWER 3 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:550984 CAPLUS  
 DOCUMENT NUMBER: 139:118095  
 TITLE: Photoprotective and lightfastness-enhancing  
 siloxanes and cosmetic composition  
 INVENTOR(S): Smith, Thomas W.; McGrane, Kathleen M.  
 PATENT ASSIGNEE(S): Xerox Corporation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 33 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003133886	A1	20030717	US 2001-1572	20011115
PRIORITY APPLN. INFO.:			US 2001-1572	20011115

AB The title triorganosilyl-terminated polysiloxane copolymers have substituents, R1-9, and R10 = alkyl, aryl, arylalkyl, or alkylaryl, R11, R12 = alkylene, arylene, arylalkylene, or alkylarylene, G = cationic moiety, A = anionic moiety, n = integer representing the no. of repeat OSi(R7)(R8) monomer units, a = integer representing the no. of repeat

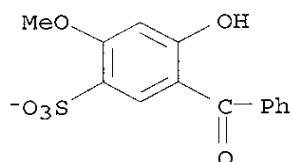
OSi(R10) (R12 -lightfastness moiety) monomer units, and c = integer representing the no. of repeat OSi(R9) (R11-hydrophilic moiety) monomer units. Sunscreen compns. are given.

IT 562084-82-6DP, trimethylsilyl-terminated  
 RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (assumed monomers; photoprotective and lightfastness  
 -enhancing siloxanes)  
 RN 562084-82-6 CAPLUS  
 CN 1-Propanaminium, 3-(dihydroxymethylsilyl)-N,N,N-trimethyl-, polymer with dimethylsilanediol, salt with 5-benzoyl-4-hydroxy-2-methoxybenzenesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 65994-36-7

CMF C14 H11 O6 S



CM 2

CRN 562084-81-5

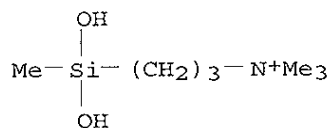
CMF (C7 H20 N O2 Si . C2 H8 O2 Si)x

CCI PMS

CM 3

CRN 438633-97-7

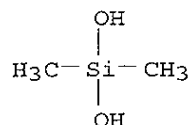
CMF C7 H20 N O2 Si



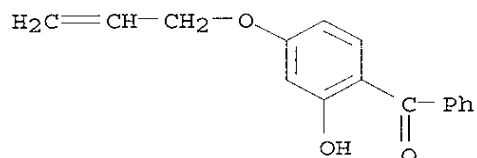
CM 4

CRN 1066-42-8

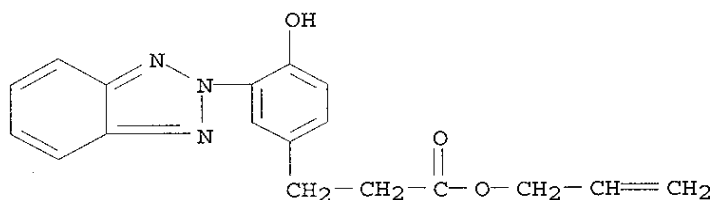
CMF C2 H8 O2 Si



IT 2549-87-3DP, reaction products with dimethylsilanediol-ethylene oxide-methylsilanediol copolymer Me ether, trimethylsilyl-terminated  
 13282-45-6DP, reaction products with dimethylsilanediol-ethylene oxide-methylsilanediol copolymer Me ether, trimethylsilyl-terminated  
 171483-98-0DP, trimethylsilyl-terminated, reaction products with **lightfastness**-enhancing groups 562084-80-4DP, reaction products with dimethylsilanediol-ethylene oxide-methylsilanediol copolymer Me ether, trimethylsilyl-terminated 562084-83-7P  
 RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (photoprotective and **lightfastness**-enhancing siloxanes)  
 RN 2549-87-3 CAPLUS  
 CN Methanone, [2-hydroxy-4-(2-propenyloxy)phenyl]phenyl- (9CI) (CA INDEX NAME)



RN 13282-45-6 CAPLUS  
 CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy-, 2-propenyl ester (9CI) (CA INDEX NAME)

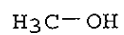


RN 171483-98-0 CAPLUS  
 CN Silanediol, dimethyl-, polymer with methylsilanediol and oxirane, methyl ether, graft (9CI) (CA INDEX NAME)

CM 1

KOROMA EIC1700

CRN 67-56-1  
CMF C H4 O

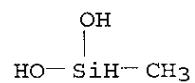


CM 2

CRN 156310-28-0  
CMF (C2 H8 O2 Si . C2 H4 O . C H6 O2 Si)x  
CCI PMS

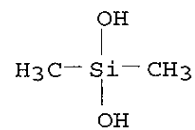
CM 3

CRN 43641-90-3  
CMF C H6 O2 Si



CM 4

CRN 1066-42-8  
CMF C2 H8 O2 Si



CM 5

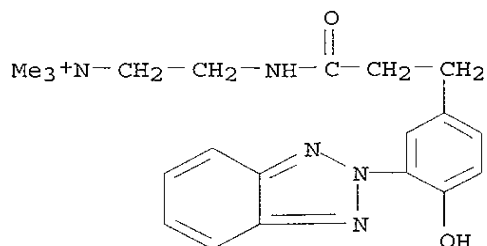
CRN 75-21-8  
CMF C2 H4 O



RN 562084-80-4 CAPLUS

KOROMA EIC1700

CN Ethanaminium, 2-[[3-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]-1-oxopropyl]amino]-N,N,N-trimethyl- (9CI) (CA INDEX NAME)



RN 562084-83-7 CAPLUS

CN QMS 435, 5-benzoyl-4-hydroxy-2-methoxybenzenesulfonate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 532383-89-4

CMF Unspecified

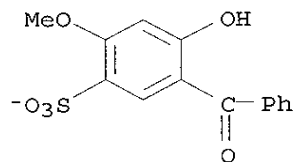
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 65994-36-7

CMF C14 H11 O6 S



IC ICM A61K007-42

ICS A61K007-021; C08G077-38

NCL 424059000; 424063000; 525474000

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 62

ST UV absorbing siloxane copolymer cosmetic

IT Polysiloxanes, preparation

RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)

(contg. UV absorbing groups; photoprotective and lightfastness-enhancing siloxanes)

KOROMA EIC1700

IT    **Sunscreens**  
       UV stabilizers  
       (photoprotective and **lightfastness**-enhancing siloxanes)

IT    **562084-82-6DP**, trimethylsilyl-terminated  
       RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)  
       (assumed monomers; photoprotective and **lightfastness**-enhancing siloxanes)

IT    **2549-87-3DP**, reaction products with dimethylsilanediol-ethylene oxide-methylsilanediol copolymer Me ether, trimethylsilyl-terminated  
       **13282-45-6DP**, reaction products with dimethylsilanediol-ethylene oxide-methylsilanediol copolymer Me ether, trimethylsilyl-terminated  
       **171483-98-0DP**, trimethylsilyl-terminated, reaction products with **lightfastness**-enhancing groups **562084-80-4DP**, reaction products with dimethylsilanediol-ethylene oxide-methylsilanediol copolymer Me ether, trimethylsilyl-terminated **562084-83-7P**  
       RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation); USES (Uses)  
       (photoprotective and **lightfastness**-enhancing siloxanes)

IT    **13688-55-6P**  
       RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
       (photoprotective and **lightfastness**-enhancing siloxanes)

IT    **79-10-7**, Propenoic acid, reactions    **999-97-3**, Hexamethyldisilazane  
       RL: RCT (Reactant); RACT (Reactant or reagent)  
       (photoprotective and **lightfastness**-enhancing siloxanes)

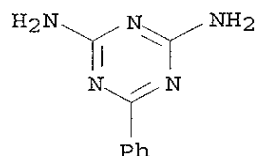
L45    ANSWER 4 OF 68    CAPLUS    COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER:            2003:523785    CAPLUS  
 DOCUMENT NUMBER:            139:92781  
 TITLE:                        **Ink-jet printing sheet containing silicone surfactant, printed material, and their application**  
 INVENTOR(S):                 Miyamoto, Kenichi; Mori, Kenichi; Morishige, Chikao  
 PATENT ASSIGNEE(S):         Toyobo Co., Ltd., Japan  
 SOURCE:                        Jpn. Kokai Tokkyo Koho, 11 pp.  
                                   CODEN: JKXXAF  
 DOCUMENT TYPE:                Patent  
 LANGUAGE:                      Japanese  
 FAMILY ACC. NUM. COUNT:     1  
 PATENT INFORMATION:

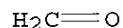
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003191619	A2	20030709	JP 2001-395212	20011226
PRIORITY APPLN. INFO.:			JP 2001-395212	20011226

AB    The material has a porous **ink** receiving layer contg. the silicone surfactant characterized by having (1) water-soly. <20 wt.% at 25.degree. and 30 min still standing and (2) 500-1500 cps viscosity at 25.degree.. Images are formed by pigment **ink** on the material. They are used by back-printing for viewing or exposing the layer to **light** for advertising **illumination**. The material shows improved laminating strength and abrasion resistance.

IT 26160-89-4, Epostar MS  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink permeating layer; ink-jet printing sheet  
 contg. silicone surfactant)  
 RN 26160-89-4 CAPLUS  
 CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA  
 INDEX NAME)  
 CM 1  
 CRN 91-76-9  
 CMF C9 H9 N5



CM 2  
 CRN 50-00-0  
 CMF C H2 O



IC ICM B41M005-00  
 ICS B41J002-01; G09F013-04  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)  
 ST ink jet printing sheet silicone surfactant  
 IT Polysiloxanes, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (FZ 4452, PT 19, ink permeating layer; ink-jet  
 printing sheet contg. silicone surfactant)  
 IT Aminoplasts  
 Polyesters, uses  
 Polyurethanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (anchor layer; ink-jet printing sheet contg. silicone  
 surfactant)  
 IT Polysiloxanes, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material  
 use); USES (Uses)  
 (di-Me, ethoxylated propoxylated, Paintad 32, anchor layer; ink

KOROMA EIC1700



- jet printing sheet contg. silicone surfactant)
- IT Polysiloxanes, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(di-Me, polyoxyethylene-polyoxypropylene-, TSF 4450, ink permeating layer; ink-jet printing sheet contg. silicone surfactant)
- IT Ink-jet recording sheets  
(ink-jet printing sheet contg. silicone surfactant)
- IT Polysiloxanes, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(polyoxyalkylene-, anchor layer; ink-jet printing sheet contg. silicone surfactant)
- IT Polyoxyalkylenes, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(polysiloxane-, anchor layer; ink-jet printing sheet contg. silicone surfactant)
- IT Surfactants  
(silicone; ink-jet printing sheet contg. silicone surfactant)
- IT Polyesters, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(support; ink-jet printing sheet contg. silicone surfactant)
- IT 75-21-8D, Oxirane, polymers with dimethylsiloxane  
75-56-9D, Methyloxirane, polymers with dimethylsiloxane  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(anchor layer; ink-jet printing sheet contg. silicone surfactant)
- IT 9003-08-1, Melamine resin 120860-05-1, Nikasol A 08 153550-40-4, Vylonal MD 16 182576-61-0, Epostar MA 1001 190606-09-8, Takelac W 635  
RL: TEM (Technical or engineered material use); USES (Uses)  
(anchor layer; ink-jet printing sheet contg. silicone surfactant)
- IT 138184-82-4, Accogel C 171903-56-3, Epostar MA 1006 217311-60-9, Acrydic A 1300  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ink absorbing layer; ink-jet printing sheet contg. silicone surfactant)
- IT 26160-89-4, Epostar MS 423125-70-6, Desmodur BL 3475  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ink permeating layer; ink-jet printing sheet contg. silicone surfactant)
- IT 252574-50-8, Acrydic Hu 596  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ink-jet printing sheet contg. silicone surfactant)
- IT 25038-59-9, Poly(ethylene terephthalate), uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(support; ink-jet printing sheet contg. silicone surfactant)

ACCESSION NUMBER: 2003:523784 CAPLUS  
 DOCUMENT NUMBER: 139:76386  
 TITLE: Ink-jet printing sheet containing silicone  
 surfactant, printed material, and their application  
 INVENTOR(S): Miyamoto, Kenichi; Mori, Kenichi; Morishige, Chikao  
 PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003191614	A2	20030709	JP 2001-394648	20011226

PRIORITY APPLN. INFO.: JP 2001-394648 20011226

AB The material has a porous ink receiving layer contg. the  
 silicone surfactant characterized by having (1) .ltoreq.300 cps viscosity  
 at 25.degree. and (2) HLB .gtoreq.6 [HLB = (wt. of hydrophilic group of  
 surfactant/total wt. of surfactant) .times. 20]. The printed material are  
 formed by using pigment ink on the material. They are used by  
 back-printing for viewing or exposing the layer to light for  
 advertising illumination. The material shows improved  
 laminating strength and abrasion resistance.

IT 26160-89-4, Epostar MS  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink permeating layer; ink-jet printing sheet  
 contg. silicone surfactant)

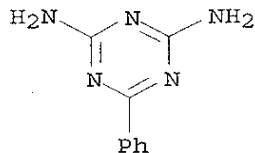
RN 26160-89-4 CAPLUS

CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA  
 INDEX NAME)

CM 1

CRN 91-76-9

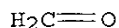
CMF C9 H9 N5



CM 2

CRN 50-00-0

CMF C H2 O



IC ICM B41M005-00  
ICS B41J002-01

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST ink jet printing sheet silicone surfactant

IT Polysiloxanes, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(FZ 2105, ink permeating layer; ink-jet printing sheet contg. silicone surfactant)

IT Aminoplasts  
Polyesters, uses  
Polyurethanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(anchor layer; ink-jet printing sheet contg. silicone surfactant)

IT Polysiloxanes, polymers  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(di-Me, polyoxyethylene-polyoxypropylene-, TSF 4440, anchor layer; ink-jet printing sheet contg. silicone surfactant)

IT Ink-jet recording sheets  
(ink-jet printing sheet contg. silicone surfactant)

IT Polysiloxanes, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(polyoxyalkylene-, anchor layer; ink-jet printing sheet contg. silicone surfactant)

IT Polysiloxanes, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(polyoxyalkylene-, graft, FZ 2118, ink permeating layer; ink-jet printing sheet contg. silicone surfactant)

IT Polyoxyalkylenes, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(polysiloxane-, anchor layer; ink-jet printing sheet contg. silicone surfactant)

IT Polyoxyalkylenes, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(polysiloxane-, graft, FZ 2118, ink permeating layer; ink-jet printing sheet contg. silicone surfactant)

IT Surfactants  
(silicone; ink-jet printing sheet contg. silicone surfactant)

IT 75-21-8D, Oxirane, polymers with dimethylsiloxane  
75-56-9D, Methyloxirane, polymers with dimethylsiloxane

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (anchor layer; ink-jet printing sheet contg. silicone surfactant)

IT 9003-08-1, Melamine resin 182576-61-0, Epostar MA 1001 190606-09-8, Takelac W 635  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (anchor layer; ink-jet printing sheet contg. silicone surfactant)

IT 138184-81-3, Accogel A 171903-56-3, Epostar MA 1006 217311-60-9, Acrydic A 1300  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink absorbing layer; ink-jet printing sheet contg. silicone surfactant)

IT 26160-89-4, Epostar MS 423125-70-6, Desmodur BL 3475  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink permeating layer; ink-jet printing sheet contg. silicone surfactant)

IT 252574-50-8, Acrydic Hu 596  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink-jet printing sheet contg. silicone surfactant)

L45 ANSWER 6 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:523783 CAPLUS

DOCUMENT NUMBER: 139:76385

TITLE: Ink jet printing sheet containing silicone surfactant, printed material, and their application

INVENTOR(S): Miyamoto, Kenichi; Mori, Kenichi; Morishige, Chikao

PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

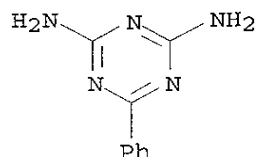
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003191609	A2	20030709	JP 2001-394643	20011226
PRIORITY APPLN. INFO.:			JP 2001-394643	20011226

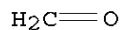
AB The material has a porous ink receiving layer contg. the silicone surfactant characterized by having (1) water-soly. .gtoreq.20 wt.% at 25.degree. and 30 min still standing and (2) HLB .gtoreq.6 [HLB = (wt. of hydrophilic group of surfactant/total wt. of surfactant) .times. 20]. The printed material are characterized by forming with pigment ink on the material. They are used by back-printing for viewing or exposing the layer to light for advertising illumination. The material shows improved laminating strength and abrasion resistance.

IT 26160-89-4, Epostar MS  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink permeating layer; ink-jet printing sheet

contg. silicone surfactant)  
 RN 26160-89-4 CAPLUS  
 CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 91-76-9  
 CMF C9 H9 N5



CM 2  
 CRN 50-00-0  
 CMF C H2 O



IC ICM B41M005-00  
 ICS B41J002-01  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 ST ink jet printing sheet silicone surfactant  
 IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (FZ 2105, ink permeating layer; ink-jet printing sheet contg. silicone surfactant)  
 IT Aminoplasts  
 Polyesters, uses  
 Polyurethanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (anchor layer; ink-jet printing sheet contg. silicone surfactant)  
 IT Polysiloxanes, uses  
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
 (di-Me, ethoxylated propoxylated, Paintad 32, anchor layer; ink-jet printing sheet contg. silicone surfactant)  
 IT Ink-jet recording sheets  
 (ink-jet printing sheet contg. silicone surfactant)  
 IT Polysiloxanes, uses

KOROMA EIC1700

- RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(polyoxyalkylene-, anchor layer; ink-jet printing sheet  
contg. silicone surfactant)
- IT Polysiloxanes, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(polyoxyalkylene-, graft, FZ 2118, ink permeating layer;  
ink-jet printing sheet contg. silicone surfactant)
- IT Polyoxyalkylenes, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(polysiloxane-, anchor layer; ink-jet printing  
sheet contg. silicone surfactant)
- IT Polyoxyalkylenes, uses  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(polysiloxane-, graft, FZ 2118, ink permeating  
layer; ink-jet printing sheet contg. silicone surfactant)
- IT Surfactants  
(silicone; ink-jet printing sheet contg. silicone surfactant)
- IT Polyesters, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(support; ink-jet printing sheet contg. silicone surfactant)
- IT 75-21-8D, Oxirane, polymers with dimethylsiloxane  
75-56-9D, Methyloxirane, polymers with dimethylsiloxane  
RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)  
(anchor layer; ink-jet printing sheet contg. silicone  
surfactant)
- IT 9003-08-1, Melamine resin 120860-05-1, Nikasol A 08 153550-40-4,  
Vylonal MD 16 182576-61-0, Epostar MA 1001 190606-09-8, Takelac W 635  
RL: TEM (Technical or engineered material use); USES (Uses)  
(anchor layer; ink-jet printing sheet contg. silicone  
surfactant)
- IT 138184-81-3, Accogel A 138184-82-4, Accogel C 171903-56-3, Epostar MA  
1006 217311-60-9, Acrydic A 1300  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ink absorbing layer; ink-jet printing sheet contg.  
silicone surfactant)
- IT 26160-89-4, Epostar MS 423125-70-6, Desmodur BL 3475  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ink permeating layer; ink-jet printing sheet  
contg. silicone surfactant)
- IT 252574-50-8, Acrydic Hu 596  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ink-jet printing sheet contg. silicone surfactant)
- IT 25038-59-9, Poly(ethylene terephthalate), uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(support; ink-jet printing sheet contg. silicone surfactant)

ACCESSION NUMBER: 2003:408787 CAPLUS  
 DOCUMENT NUMBER: 138:409416  
 TITLE: Recording sheets with **lightfastness**  
 -enhancing **siloxanes**  
 INVENTOR(S): Smith, Thomas W.; McGrane, Kathleen M.  
 PATENT ASSIGNEE(S): Xerox Corporation, USA  
 SOURCE: U.S., 34 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6569511	B1	20030527	US 2001-2342	20011115

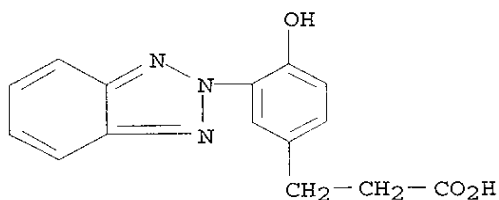
PRIORITY APPLN. INFO.: US 2001-2342 20011115

AB Disclosed is a recording sheet which comprises a substrate and an image-receiving coating situated on at least one surface of the substrate, said image-receiving coating being suitable for receiving images of an aq. ink, said image-receiving coating comprising a **lightfastness** agent which is a **polysiloxane** having thereon a hydrophilic moiety and a **lightfastness** moiety.

IT 14234-65-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. of **lightfastness**-enhancing **siloxanes** for recording sheets)

RN 14234-65-2 CAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy- (9CI) (CA INDEX NAME)

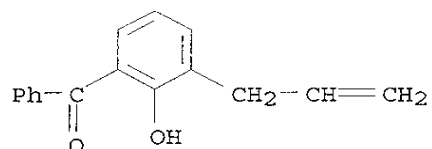


IT 46874-86-6DP, reaction products with dimethylsilanediol-ethylene oxide-methylsilanediol graft **copolymer** Me ether  
 171483-98-0DP, Dimethylsilanediol-ethylene oxide-methylsilanediol graft **copolymer** methyl ether, reaction products  
 223463-29-4DP, reaction products with diemthylsilanediol-ethylene oxide-methylsilanediol graft **copolymer** Me ether  
 531534-02-8DP, reaction products with dimethylsilanediol-ethylene oxide-methylsilanediol graft **copolymer** Me ether  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(recording sheets with lightfastness-enhancing  
siloxanes)

RN 46874-86-6 CAPLUS

CN Methanone, [2-hydroxy-3-(2-propenyl)phenyl]phenyl- (9CI) (CA INDEX NAME)



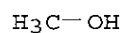
RN 171483-98-0 CAPLUS

CN Silanediol, dimethyl-, polymer with methylsilanediol and oxirane, methyl ether, graft (9CI) (CA INDEX NAME)

CM 1

CRN 67-56-1

CMF C H4 O



CM 2

CRN 156310-28-0

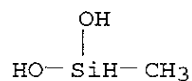
CMF (C2 H8 O2 Si . C2 H4 O . C H6 O2 Si)x

CCI PMS

CM 3

CRN 43641-90-3

CMF C H6 O2 Si



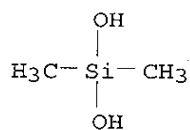
CM 4

CRN 1066-42-8

CMF C2 H8 O2 Si

KOROMA EIC1700





CM 5

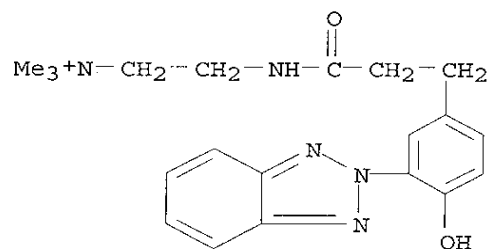
CRN 75-21-8

CMF C2 H4 O



RN 223463-29-4 CAPLUS

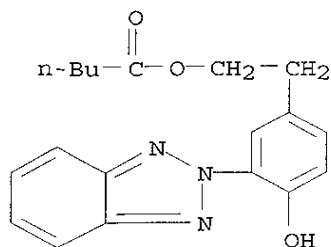
CN Ethanaminium, 2-[[3-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]-1-oxopropyl]amino]-N,N,N-trimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl<sup>-</sup>

RN 531534-02-8 CAPLUS

CN Pentanoic acid, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester (9CI) (CA INDEX NAME)



- IC ICM B32B003-00  
 NCL 428195000; 347105000; 428447000  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 Section cross-reference(s): 35, 38  
 ST **ink jet recording sheets lightfastness enhancing siloxanes**  
 IT **Ink-jet recording sheets**  
 (recording sheets with **lightfastness-enhancing siloxanes**)  
 IT **Polysiloxanes, uses**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (recording sheets with **lightfastness-enhancing siloxanes**)  
 IT 88-74-4 109-52-4, Pentanoic acid, reactions 501-97-3 999-97-3,  
 Hexamethyldisilazane 3399-67-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of **lightfastness-enhancing siloxanes** for recording sheets)  
 IT 119-66-4P 14234-65-2P 171504-00-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. of **lightfastness-enhancing siloxanes** for recording sheets)  
 IT 23523-56-0DP, reaction products with diemthylsilanediol-ethylene oxide-methylsilanediol graft **copolymer** Me ether  
 RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (prepn. of **lightfastness-enhancing siloxanes** for recording sheets)  
 IT 6628-37-1DP, Sodium 2-hydroxy-4-methoxybenzophenone-5-sulfonate, reaction products with diemthylsilanediol-trimethylaminopropyl methylsilanediol **copolymer** 46874-86-6DP, reaction products with dimethylsilanediol-ethylene oxide-methylsilanediol graft **copolymer** Me ether 171483-98-0DP, Dimethylsilanediol-ethylene oxide-methylsilanediol graft **copolymer** methyl ether, reaction products 223463-29-4DP, reaction products with diemthylsilanediol-ethylene oxide-methylsilanediol graft **copolymer** Me ether 531534-02-8DP, reaction products with dimethylsilanediol-ethylene oxide-methylsilanediol graft **copolymer**

Me ether 532383-89-4DP, QMS 435, reaction products with sodium  
2-hydroxy-4-methoxybenzophenone-5-sulfonate  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(recording sheets with **lightfastness-enhancing**  
**siloxanes**)

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 8 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:55002 CAPLUS

DOCUMENT NUMBER: 138:112449

TITLE: Production of liposomes coated with  
polyhydroxyalkanoate

INVENTOR(S): Nomoto, Tsuyoshi; Yano, Tetsuya; Kozaki, Shinya;  
Honma, Tsutomu

PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan

SOURCE: Eur. Pat. Appl., 61 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1277464	A2	20030122	EP 2002-15375	20020710
EP 1277464	A3	20030604		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2003024767	A2	20030128	JP 2001-210020	20010710
US 2003113368	A1	20030619	US 2002-190490	20020709
PRIORITY APPLN. INFO.:			JP 2001-210020	A 20010710

OTHER SOURCE(S): MARPAT 138:112449

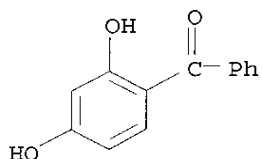
AB A structure is provided that has both drug holding capability and  
sustained releasability of a liposome and mech. strength of  
polyhydroxyalkanoate (PHA). It is produced by coating with  
polyhydroxyalkanoate at least part of the outer wall of the liposome. The  
structure is excellent in holding capability for hydrophilic and  
lipophilic drugs and other water-sol. and hydrophobic substances, and is  
capable of controlling the sustained releasability. For example,  
controlled drug release was obtained by encapsulating calcein in liposomes  
coated with poly(3-hydroxyoctanoic acid) prep. using PHA synthase derived  
from Pseudomonas cichorii and (R)-3-hydroxyoctanoyl CoA substrate.

IT 131-56-6, 2,4-Dihydroxybenzophenone

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(prodn. of polyhydroxyalkanoate-coated liposomes for  
controlled/sustained release)

RN 131-56-6 CAPLUS

CN Methanone, (2,4-dihydroxyphenyl)phenyl- (9CI) (CA INDEX NAME)



- IC ICM A61K009-127
- CC 63-6 (Pharmaceuticals)
- Section cross-reference(s): 5, 16, 35, 42, 62
- ST polyhydroxyalkanoate liposome coating controlled sustained drug release;  
PHA synthase hydroxyacyl CoA biochem polymn liposome coating
- IT Burkholderia  
(OK3 and OK4, genetically transformed; prodn. of polyhydroxyalkanoate-coated liposomes using microorganism-derived PHA synthase and hydroxyalkyl CoA substrate)
- IT Alcaligenes  
(TL2; genetically transformed; prodn. of polyhydroxyalkanoate-coated liposomes using microorganism-derived PHA synthase and hydroxyalkyl CoA substrate)
- IT Polysiloxanes, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(amino-terminated; grafts with polyhydroxyalkanoates; prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Erythrocyte  
(artificial; prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Polymerization  
(biochem.; prodn. of polyhydroxyalkanoate-coated liposomes using microorganism-derived PHA synthase and hydroxyalkyl CoA substrate)
- IT Agrochemical formulations  
(controlled-release, liposomes; prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Amines, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(diamines, crosslinking agents; prodn. of crosslinked polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Burkholderia cepacia  
Escherichia coli  
Pseudomonas cichorii  
Pseudomonas jessenii  
Pseudomonas putida  
Ralstonia eutropha  
(genetically transformed; prodn. of polyhydroxyalkanoate-coated liposomes using microorganism-derived PHA synthase and hydroxyalkyl CoA substrate)
- IT Polyesters, biological studies  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(graft, hydroxycarboxylic acid-based; prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Polyesters, biological studies

- RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(hydroxycarboxylic acid-based; prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Drug delivery systems  
(liposomes, controlled-release; prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Drug delivery systems  
(liposomes, sustained-release; prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Cosmetics  
(liposomes; prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Crosslinking  
Crosslinking agents  
(prodn. of crosslinked polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Agrochemicals  
Blood substitutes  
Dyes  
Pigments, nonbiological  
(prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Fertilizers  
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)  
(prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Hemoglobins  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Encapsulation  
(prodn. of polyhydroxyalkanoate-coated liposomes using microorganism-derived PHA synthase and hydroxyalkyl CoA substrate)
- IT Crosslinking  
(radiochem.; prodn. of crosslinked polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT Agrochemical formulations  
(sustained-release, liposomes; prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT 108-30-5, Succinic anhydride, reactions 124-09-4, Hexamethylenediamine, reactions 931-36-2, 2-Ethyl-4-methylimidazole  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(crosslinking agent; prodn. of crosslinked polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT 69071-40-5, Direct Special Black AXN  
RL: NUU (Other use, unclassified); USES (Uses)  
(ink compn. contg.; prodn. of polyhydroxyalkanoate-coated liposomes for controlled/sustained release)
- IT 487028-92-2P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(prodn. of crosslinked polyhydroxyalkanoate-coated liposomes for controlled/sustained release)

- IT 122-14-5, O,O-Dimethyl-O-(3-methyl-4-nitrophenyl) phosphorothioate  
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)  
(prodn. of polyhydroxyalkanoate-coated liposomes for  
controlled/sustained release)
- IT 473988-23-7P 473988-24-8P  
RL: AGR (Agricultural use); BPN (Biosynthetic preparation); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(prodn. of polyhydroxyalkanoate-coated liposomes for  
controlled/sustained release)
- IT 154994-48-6P 155075-32-4P  
RL: BPN (Biosynthetic preparation); COS (Cosmetic use); THU (Therapeutic  
use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prodn. of polyhydroxyalkanoate-coated liposomes for  
controlled/sustained release)
- IT 487028-91-1P  
RL: BPN (Biosynthetic preparation); RCT (Reactant); BIOL (Biological  
study); PREP (Preparation); RACT (Reactant or reagent)  
(prodn. of polyhydroxyalkanoate-coated liposomes for  
controlled/sustained release)
- IT 172923-04-5P, Isotactic Poly((R)-3-hydroxy-5-phenylvaleric acid)  
340255-66-5P  
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(prodn. of polyhydroxyalkanoate-coated liposomes for  
controlled/sustained release)
- IT 14292-27-4, 3-Hydroxyoctanoic acid 473988-22-6 473994-63-7  
RL: BSU (Biological study, unclassified); BIOL (Biological study)  
(prodn. of polyhydroxyalkanoate-coated liposomes for  
controlled/sustained release)
- IT 131-56-6, 2,4-Dihydroxybenzophenone  
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)  
(prodn. of polyhydroxyalkanoate-coated liposomes for  
controlled/sustained release)
- IT 1404-90-6, Vancomycin 1461-15-0, Calcein 9002-98-6D, grafts with  
polyhydroxyalkanoates 26336-38-9D, Polyvinyl amine, grafts with  
polyhydroxyalkanoates  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(prodn. of polyhydroxyalkanoate-coated liposomes for  
controlled/sustained release)
- IT 134688-88-3, PHA synthase  
RL: CAT (Catalyst use); USES (Uses)  
(prodn. of polyhydroxyalkanoate-coated liposomes using  
microorganism-derived PHA synthase and hydroxyalkyl CoA substrate)

L45 ANSWER 9 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2003:40121 CAPLUS

DOCUMENT NUMBER: 138:112441

TITLE: Particulate construct comprising polyhydroxyalkanoate  
and method for producing it

INVENTOR(S): Yano, Tetsuya; Nomoto, Tsuyoshi; Kozaki, Shinya;  
Honma, Tsutomu

PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan

KOROMA EIC1700

SOURCE: Eur. Pat. Appl., 116 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1275378	A2	20030115	EP 2002-15357	20020710
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2003175092	A2	20030624	JP 2002-196578	20020704
CN 1431041	A	20030723	CN 2002-151808	20020710
PRIORITY APPLN. INFO.:			JP 2001-210040	A 20010710
			JP 2001-210041	A 20010710
			JP 2001-210043	A 20010710
			JP 2001-210055	A 20010710

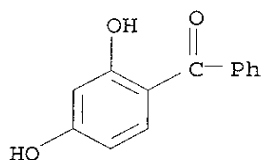
AB A particulate construct, such as microcapsules, comprises an external solid phase contg. polyhydroxyalkanoate (PHA), prepd. by biochem. polymn. of a 3-hydroxyalkanoic acid monomer unit using PHA synthetase, and an internal phase contg. at least one solid phase, liq. phase, and gaseous phase. The internal phase is selected from, e.g., an agricultural drug component, an ultrasonic contrast medium, a perfluorocarbon gas, a dye or a pigment for ink compns., Hb, a cosmetic component, or a fertilizer component. A method for producing such particulate construct and a slow releasing prepn. of a high drug content capable of stably incorporating the drug in the particulate construct with zero-order release for a certain period are described. For example, microcapsules holding an antibiotic, vancomycin, were prepd. To 70 mL of chloroform, were added 10 mL of 5% glucose soln. contg. 0.2 g of vancomycin, the PHA synthetase YN2-C1 prepd. from Pseudomonas cichorii YN2 strain with a concn. of 10 U/mL, and (R)-3-hydroxyoctanoyl CoA to end concn. of 1 mM, and the mixt. was emulsified with a probe ultrasonic oscillator to obtain a w/o emulsion. The emulsion thus prepd. was incubated for PHA synthesis at 37.degree. for 3 h. The reaction liq. was size sepd. by gel filtration (Sephadex G-50 column) to obtain microcapsules. Based on the dynamic light scattering method, the microcapsules had an av. particle size of 840 nm and was in a monodispersed state. The PHA (Mn = 15,000 and Mw = 37,000) was comprised of 3-hydroxy-5-valeric acid monomer unit.

IT 131-56-6, 2,4-Dihydroxybenzophenone  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. polymn. of hydroxyacyl CoA in presence of PHA synthase)

RN 131-56-6 CAPLUS

CN Methanone, (2,4-dihydroxyphenyl)phenyl- (9CI) (CA INDEX NAME)



- IC ICM A61K009-16  
ICS A61K009-50; C12P007-62
- CC 63-6 (Pharmaceuticals)  
Section cross-reference(s): 1, 5, 16, 35, 42, 62
- ST polyhydroxyalkanoate prepn PHA synthase hydroxyacyl CoA microcapsule;  
encapsulation agrochem cosmetic drug polyhydroxyalkanoate; slow release  
microcapsule polyhydroxyalkanoate biochem **polymn**
- IT Imaging agents  
(acoustic imaging contrast agents, internal phase contg.; prepn. of  
slow-release polyhydroxyalkanoate microcapsules by biochem.  
**polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT **Polysiloxanes**, biological studies  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
study); PREP (Preparation); USES (Uses)  
(amino, grafts with polyhydroxyalkanoates; prepn. of slow-release  
polyhydroxyalkanoate microcapsules by biochem. **polymn.** of  
hydroxyacyl CoA in presence of PHA synthase)
- IT **Polymerization**  
(biochem.; prepn. of slow-release polyhydroxyalkanoate microcapsules by  
biochem. **polymn.** of hydroxyacyl CoA in presence of PHA  
synthase)
- IT Capsules  
(cosmetic microcapsules; prepn. of slow-release polyhydroxyalkanoate  
microcapsules by biochem. **polymn.** of hydroxyacyl CoA in  
presence of PHA synthase)
- IT Amines, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(diamines, crosslinking agents; prepn. of slow-release  
polyhydroxyalkanoate microcapsules by biochem. **polymn.** of  
hydroxyacyl CoA in presence of PHA synthase)
- IT Escherichia coli  
(genetically transformed; prepn. of slow-release polyhydroxyalkanoate  
microcapsules by biochem. **polymn.** of hydroxyacyl CoA in  
presence of PHA synthase)
- IT Polyesters, biological studies  
RL: AGR (Agricultural use); BPN (Biosynthetic preparation); COS (Cosmetic  
use); NUU (Other use, unclassified); THU (Therapeutic use); BIOL  
(Biological study); PREP (Preparation); USES (Uses)  
(hydroxycarboxylic acid-based; prepn. of slow-release  
polyhydroxyalkanoate microcapsules by biochem. **polymn.** of  
hydroxyacyl CoA in presence of PHA synthase)
- IT Cosmetics  
(internal phase contg. ingredients for; prepn. of slow-release



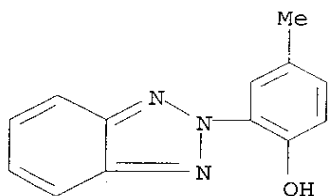
- polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT **Dyes**  
Pigments, nonbiological  
(internal phase contg.; prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT **Fertilizers**  
RL: AGR (Agricultural use); BIOL (Biological study); USES (Uses)  
(internal phase contg.; prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT **Hemoglobins**  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(internal phase contg.; prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT **Perfluorocarbons**  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(internal phase contg.; prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT **Drug delivery systems**  
(microcapsules, slow-release; prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT **Agrochemical formulations**  
Cosmetics  
(microcapsules; prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT **Encapsulation**  
(microencapsulation; prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT **Agrochemicals**  
Alcaligenes  
Burkholderia  
Burkholderia cepacia  
Crosslinking agents  
Particle size  
Pseudomonas cichorii  
Pseudomonas jessenii  
Pseudomonas putida  
Ralstonia eutropha  
(prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT **Inks**  
(prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase for inks)
- IT **Crosslinking**

- (radiochem.; prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT Drug delivery systems  
(slow-release, microcapsules; prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT 108-30-5, Succinic anhydride, reactions 124-09-4, Hexamethylenediamine, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(crosslinking agent; prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT 111-66-0, 1-Octene 124-07-2, Octanoic acid, processes 625-72-9, (R)-3-Hydroxybutyric acid 4144-62-1, 5-Benzoylvaleric acid 4441-63-8, 4-Cyclohexylbutyric acid 24484-22-8 44987-72-6, (R)-3-Hydroxyoctanoic acid 153744-07-1 155638-20-3 454704-38-2 477219-09-3  
RL: BCP (Biochemical process); BIOL (Biological study); PROC (Process)  
(prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT 358718-36-2 393085-31-9 404892-66-6 452081-80-0 463301-93-1 477345-14-5  
RL: BCP (Biochemical process); RCT (Reactant); BIOL (Biological study); PROC (Process); RACT (Reactant or reagent)  
(prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT 31759-58-7P 141455-97-2P 154994-48-6P 155075-32-4P 172923-04-5P 340255-66-5P 347867-66-7P 347867-67-8P 457659-01-7P 473988-23-7P 473988-24-8P 484040-58-6P 484685-20-3P 484685-21-4P 484685-22-5P 484685-23-6P 484685-24-7P 484685-25-8P 484685-26-9P 484685-27-0P 484685-28-1P 484685-29-2P 484685-30-5P 485842-26-0P  
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT 134688-88-3, Polyhydroxyalkanoate synthetase  
RL: CAT (Catalyst use); USES (Uses)  
(prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT 69071-40-5, Direct special black AXN  
RL: NUU (Other use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)  
(prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT 122-14-5 131-56-6, 2,4-Dihydroxybenzophenone 1404-90-6, Vancomycin 1461-15-0, Calcein 153031-21-1 168395-24-2  
RL: PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)  
(prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. **polymn.** of hydroxyacyl CoA in presence of PHA synthase)
- IT 9002-98-6DP, grafts with polyhydroxyalkanoates 26336-38-9DP,

Polyvinylamine, grafts with polyhydroxyalkanoates  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of slow-release polyhydroxyalkanoate microcapsules by biochem. polymn. of hydroxyacyl CoA in presence of PHA synthase)  
 IT 485889-50-7 485889-51-8 485889-52-9 485889-53-0 485889-54-1, 5:  
 PN: EP1275378 SEQID: 5 unclaimed DNA 485889-55-2, 6: PN: EP1275378  
 SEQID: 6 unclaimed DNA 485889-56-3 485889-57-4 485889-58-5  
 485889-59-6 485889-60-9 485889-61-0  
 RL: PRP (Properties)  
 (unclaimed nucleotide sequence; particulate construct comprising polyhydroxyalkanoate and method for producing it)

L45 ANSWER 10 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:927822 CAPLUS  
 DOCUMENT NUMBER: 138:14769  
 TITLE: Uv-sensitive marking composition for temporarily visible mark  
 INVENTOR(S): Fox, Neil S.; Finke, Christopher P.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 6 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002178970	A1	20021205	US 2001-873027	20010601
PRIORITY APPLN. INFO.:			US 2001-873027	20010601
AB The marking compn. for placing a temporarily visible mark on a surface comprises a paint base, and a pigmented <b>colorant</b> the mark of which progressively but substantially becomes invisible upon exposure to UV light. Thus, a compn. from xylene 44, acrylic <b>polymer</b> 25, Special Fugitive <b>Colorant</b> 20, and Tinuvin P 1, and then acetone 1 and xylene 9 parts was dried within 15 min. to give a mark, which was disappeared significantly after 15 days and became almost completely invisible by day 40.				
IT 2440-22-4, Tinuvin P				
RL: TEM (Technical or engineered material use); USES (Uses) (Uv-sensitive marking compn. for temporarily visible mark)				
RN 2440-22-4 CAPLUS				
CN Phenol, 2-(2H-benzotriazol-2-yl)-4-methyl- (9CI) (CA INDEX NAME)				



IC ICM C09D011-02  
 NCL 106031640; 106031750; 106031770; 106031860; 106031690; 106031880  
 CC 42-12 (Coatings, Inks, and Related Products)  
 ST acrylic UV sensitive marking compn temporary mark  
 IT **Coloring materials**  
     **Light-sensitive materials**  
     Pigments, nonbiological  
         (Uv-sensitive marking compn. for temporarily visible mark)  
 IT Acrylic polymers, uses  
     Alkyd resins  
     Epoxy resins, uses  
     Phenolic resins, uses  
     **Polysiloxanes, uses**  
     Polyurethanes, uses  
     RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
         (Uv-sensitive marking compn. for temporarily visible mark)  
 IT Terpenes, uses  
     RL: TEM (Technical or engineered material use); USES (Uses)  
         (Uv-sensitive marking compn. for temporarily visible mark)  
 IT **Inks**  
     (marketing; Uv-sensitive marking compn. for temporarily visible mark)  
 IT Vinyl compounds, uses  
     RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
         (**polymers**; Uv-sensitive marking compn. for temporarily visible mark)  
 IT 9003-53-6, Polystyrene 9004-34-6, Cellulose, uses 477795-91-8, MacoPol WR 214-3100  
     RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
         (Uv-sensitive marking compn. for temporarily visible mark)  
 IT 2440-22-4, Tinuvin P  
     RL: TEM (Technical or engineered material use); USES (Uses)  
         (Uv-sensitive marking compn. for temporarily visible mark)

L45 ANSWER 11 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:728733 CAPLUS  
 DOCUMENT NUMBER: 137:249201  
 TITLE: Thermal transfer protective sheets with good water absorption, and thermal-transfer-printed matters protected with them

INVENTOR(S): Obouchi, Naohiro; Usuki, Hideki  
 PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002274064	A2	20020925	JP 2001-213845	20010713
PRIORITY APPLN. INFO.:			JP 2001-6181	A 20010115

AB The transfer sheet comprises (A) a substrate release layer, (B) a water absorbing layer comprising polyvinyl alc. (I), SiO<sub>2</sub> spherical micropowders, and colloidal silica, and (C) an adhesive layer. Thus, a transfer sheet consisting of (A) a PET substrate layer with an acrylic silicone release layer (Celtop 226), (B) a water-absorbing layer comprising I (Poval C 318), SiO<sub>2</sub> (Sylosphere C 1504), and colloidal silica (Snowtex O), (C) a primer layer of polyvinylpyrrolidone (K 90), and (D) an adhesive layer comprising a polyester (Vylon 700), a UV-absorbing acrylic resin (UVA 635L), and SiO<sub>2</sub> (Sylsia 310) was heat-transferred on a printed image to give a protective layer showing good transparency and stamp ink stability.

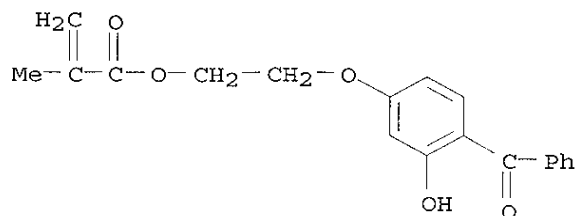
IT 25189-68-8, UVA 635L  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (UV absorber, adhesive layer contg.; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)

RN 25189-68-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

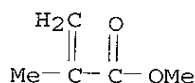
CRN 16613-04-0  
 CMF C19 H18 O5



CM 2  
 CRN 80-62-6

KOROMA EIC1700

CMF C5 H8 O2



- IC ICM B41M005-38
- ICS B41J031-00; B41J031-05; B41M005-26; B41M005-40
- CC 42-10 (Coatings, Inks, and Related Products)
- Section cross-reference(s): 74
- ST thermal transfer sheet image protective film; colloidal silica transfer coating water absorbent; polyvinyl alc thermal transfer coating transparency
- IT Polysiloxanes, uses
  - RL: TEM (Technical or engineered material use); USES (Uses)
  - (acrylic-epoxy, Celtop 226, release layer; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT Epoxy resins, uses
  - RL: TEM (Technical or engineered material use); USES (Uses)
  - (acrylic-polysiloxane-, Celtop 226, release layer; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT Polyesters, uses
  - RL: TEM (Technical or engineered material use); USES (Uses)
  - (adhesive layer, primer layer; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT Epoxy resins, uses
  - Polycarbonates, uses
  - RL: TEM (Technical or engineered material use); USES (Uses)
  - (adhesive layer; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT Ethers, uses
  - RL: TEM (Technical or engineered material use); USES (Uses)
  - (alkyl vinyl, polymers, primer layer; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT Transparent materials
  - (coatings; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT Alkyd resins
  - RL: TEM (Technical or engineered material use); USES (Uses)
  - (primer layer; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT Polyesters, uses
  - RL: TEM (Technical or engineered material use); USES (Uses)
  - (release sheet; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT Thermal-transfer printing materials
  - (sheets; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)

- IT Coating materials  
(transparent; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT Coating materials  
(water-absorbing; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT 25189-68-8, UVA 635L  
RL: TEM (Technical or engineered material use); USES (Uses)  
(UV absorber, adhesive layer contg.; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT 9003-22-9, Vinyl acetate-vinyl chloride copolymer 460352-13-0, Vylon 700  
RL: TEM (Technical or engineered material use); USES (Uses)  
(adhesive layer; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT 110-16-7D, Maleic acid, polymers 9003-39-8, K 90 9004-34-6, Cellulose, uses 143929-13-9, WR 961  
RL: TEM (Technical or engineered material use); USES (Uses)  
(primer layer; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT 25038-59-9, PET polymer, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(release sheet; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT 7631-86-9, Silica, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(spherical powder, colloidal, water-absorbing layer contg.; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT 460331-31-1P, Acrylamide-glyoxal-urea-Poval C 318 copolymer  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(water-absorbing layer; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)
- IT 9002-89-5, Gohsenol GL 03 102577-34-4, Poval C 318 124364-09-6, Gohsenol KH 17 151065-52-0, Gohsenol KP 06  
RL: TEM (Technical or engineered material use); USES (Uses)  
(water-absorbing layer; thermal transfer protective sheets with good water absorption for thermal-transfer-printed images)

L45 ANSWER 12 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:688186 CAPLUS

DOCUMENT NUMBER: 137:239720

TITLE: One-component photocurable resist composition for electronic parts

INVENTOR(S): Hiwasa, Nobu

PATENT ASSIGNEE(S): Otex K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

KOROMA EIC1700

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002256063	A2	20020911	JP 2001-55168	20010228
PRIORITY APPLN. INFO.:			JP 2001-55168	20010228
OTHER SOURCE(S): MARPAT 137:239720				

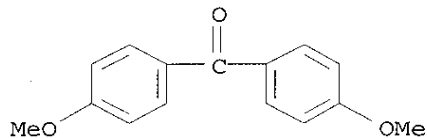
AB The compn. comprises (a) cation-polymerizable org. substances of methylol compds., ethylenically unsatd. compds., and/or heterocyclic compds. 0.1-95, (b) latent photopolymn. initiators of cryst. ion-assocn. substances represented by  $[\{C5(R1)n\}2mMm]1+[\{B(R2)4\}-]1$  [M = Fe; C5 = cyclopentadienyl; R1 = electron-donating alkyl group bonded to C of C5; n = 5; m = 1 = 1; R2 = (halogenated) aryl or halogenated alkyl ligand coordinated to B atom; 4 of R2 have same identity] 0.01-10, and (c) sensitizers 0.1-10%. The compn. may contain 0.5-90% inorg. fillers. The compn. is used for patterning resists, solder resists, plating resists, hole-embedding inks and resists, and conductive inks.

IT 90-96-0, 4,4'-Dimethoxybenzophenone 611-94-9, 4-Methoxybenzophenone 611-99-4, 4,4'-Dihydroxybenzophenone 1137-42-4, 4-Hydroxybenzophenone 13020-57-0, 3-Hydroxybenzophenone 41295-28-7, 3,3'-Dimethyl-4-methoxybenzophenone

RL: TEM (Technical or engineered material use); USES (Uses) (sensitizer; one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

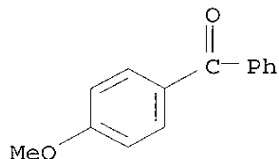
RN 90-96-0 CAPLUS

CN Methanone, bis(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 611-94-9 CAPLUS

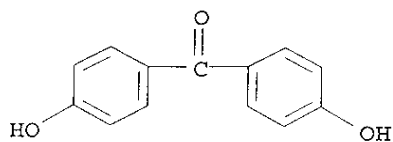
CN Methanone, (4-methoxyphenyl)phenyl- (9CI) (CA INDEX NAME)



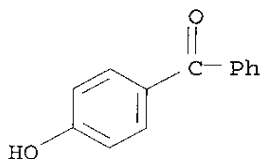
RN 611-99-4 CAPLUS

CN Methanone, bis(4-hydroxyphenyl)- (9CI) (CA INDEX NAME)

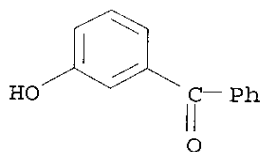




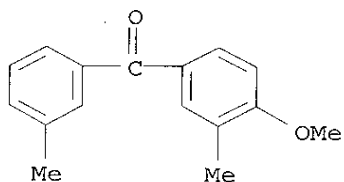
RN 1137-42-4 CAPLUS  
CN Methanone, (4-hydroxyphenyl)phenyl- (9CI) (CA INDEX NAME)



RN 13020-57-0 CAPLUS  
CN Methanone, (3-hydroxyphenyl)phenyl- (9CI) (CA INDEX NAME)



RN 41295-28-7 CAPLUS  
CN Methanone, (4-methoxy-3-methylphenyl)(3-methylphenyl)- (9CI) (CA INDEX NAME)



IC ICM C08G059-72  
ICS C09K003-00  
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 37, 76  
ST photocurable resist cation **polymerizable** org substance; ion assocn substance latent **photopolymer** initiator resist; sensitizer latent **photopolymer** initiator one component resist; methylol

KOROMA EIC1700

cation **polymerizable** photoresist elec part; unsatd compd cation  
**polymerizable** photoresist elec part; heterocyclic compd cation  
**polymerizable** photoresist elec part

IT Ethers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(cyclic; one-component photoresist compn. contg. cation-  
**polymerizable** substances, latent initiators, and sensitizers  
for electronic parts)

IT **Inks**  
(elec. conductive; one-component photoresist compn. contg. cation-  
**polymerizable** substances, latent initiators, and sensitizers  
for electronic parts)

IT Electric conductors  
(**inks**; one-component photoresist **compn. contg.**  
cation-**polymerizable** substances, latent initiators, and  
sensitizers for electronic parts)

IT Photoresists  
Printed circuit boards  
Solder resists  
(one-component photoresist compn. contg. cation-**polymerizable**  
substances, latent initiators, and sensitizers for electronic parts)

IT **Cyclosiloxanes**  
Epoxides  
Epoxy resins, uses  
Lactams  
RL: TEM (Technical or engineered material use); USES (Uses)  
(one-component photoresist compn. contg. cation-**polymerizable**  
substances, latent initiators, and sensitizers for electronic parts)

IT **Polymerization catalysts**  
(**photopolymn.**, latent; one-component photoresist compn.  
contg. cation-**polymerizable** substances, latent initiators,  
and sensitizers for electronic parts)

IT 1344-28-1, Alumina, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Admafine AO 802, filler; one-component photoresist compn. contg.  
cation-**polymerizable** substances, latent initiators, and  
sensitizers for electronic parts)

IT 141-78-6, Acetidin, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(acetidin; one-component photoresist compn. contg. cation-  
**polymerizable** substances, latent initiators, and sensitizers  
for electronic parts)

IT 471-34-1, Calcium carbonate, uses 7631-86-9, SO-E2, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(filler; one-component photoresist compn. contg. cation-  
**polymerizable** substances, latent initiators, and sensitizers  
for electronic parts)

IT 220517-46-4  
RL: CAT (Catalyst use); USES (Uses)  
(one-component photoresist compn. contg. cation-**polymerizable**  
substances, latent initiators, and sensitizers for electronic parts)

IT 56-81-5D, Glycerin, polyglycidyl ether 95-96-5, Lactide 96-08-2,

Limonene dioxide 109-99-9, Tetrahydrofuran, uses 110-88-3, Trioxane, uses 122-60-1, Phenyl glycidyl ether 123-91-1, Dioxane, uses 151-56-4, Aziridine, uses 286-20-4, Cyclohexene oxide 503-30-0, Oxetane 592-90-5, Oxepane 646-06-0, Dioxolane 930-22-3 1072-43-1, Propylene sulfide 2238-07-5, Diglycidyl ether 2386-90-5, Bis(2,3-epoxycyclopentyl) ether 2426-08-6, Butyl glycidyl ether 2451-62-9, Triglycidyl isocyanurate 4206-61-5, Diethylene glycol diglycidyl ether 5493-45-8 6303-21-5D, Phosphinic acid, esters 10580-65-1, Nonyl glycidyl ether 13410-52-1 13561-08-5, 2,6-Diglycidyl phenylglycidyl ether 13598-36-2D, Phosphonic acid, esters 16096-31-4, 1,6-Hexanediol diglycidyl ether 17557-23-2, Neopentyl glycol diglycidyl ether 18425-64-4, Trimethylolpropane diglycidyl ether 26142-30-3, Polypropylene glycol diglycidyl ether 26283-70-5, Epikote YL 6663 26403-72-5, Polyethylene glycol diglycidyl ether 26447-14-3, Cresyl glycidyl ether 28768-32-3 30424-08-9 30969-75-6, Oxazoline 58421-55-9, Epiclon 830S 65992-66-7, 1,3-Bis(N,N-diglycidylaminomethyl)cyclohexane 92308-50-4, RE 305 172416-00-1, Aron Oxetane OXT 121

RL: TEM (Technical or engineered material use); USES (Uses)

(one-component photoresist compn. contg. cation-polymerizable substances, latent initiators, and sensitizers for electronic parts)

IT 56-55-3, 1,2-Benzoanthracene 81-64-1, Quinizarin 82-34-8, 1-Nitroanthraquinone 84-11-7, 9,10-Phenanthrenedione 84-51-5, 2-Ethylantraquinone 84-54-8, 2-Methylantraquinone 84-65-1, Anthraquinone 85-52-9, o-Benzoylbenzoic acid 90-44-8, Anthrone 90-47-1, Xanthone 90-96-0, 4,4'-Dimethoxybenzophenone 92-91-1 93-04-9, 2-Methoxynaphthalene 98-86-2, Acetophenone, uses 98-86-2D, Acetophenone, dimethoxy deriv 100-06-1 117-80-6, 2,3-Dichloro-1,4-naphthoquinone 119-61-9, Benzophenone, uses 120-12-7, Anthracene, uses 131-09-9, 2-Chloroanthraquinone 131-58-8, 2-Methylbenzophenone 134-81-6, Benzil 134-84-9, 4-Methylbenzophenone 256-81-5, 5H-Dibenzo[a,d]cycloheptene 492-22-8, Thioxanthone 527-61-7, 2,6-Dimethyl-1,4-benzoquinone 574-09-4, 2-Ethoxy-2-phenylacetophenone 605-94-7, 2,3-Dimethoxy-5-methyl-1,4-benzoquinone 606-28-0, Methyl o-benzoylbenzoate 611-94-9, 4-Methoxybenzophenone 611-99-4, 4,4'-Dihydroxybenzophenone 615-93-0, 2,5-Dichloro-p-benzoquinone 643-65-2, 3-Methylbenzophenone 829-20-9 1137-42-4, 4-Hydroxybenzophenone 1201-38-3 1210-12-4, 9-Cyanoanthracene 1210-35-1, Dibenzosuberone 1217-45-4, 9,10-Dicyanoanthracene 1676-63-7 2040-04-2 2128-93-0, 4-Phenylbenzophenone 2498-66-0, 1,2-Benzanthraquinone 2571-39-3, 3,4-Dimethylbenzophenone 2880-58-2 3524-62-7, Benzoin methyl ether 4044-60-4, 2,5-Dimethylbenzophenone 6175-45-7, Diethoxyacetophenone 6652-28-4, Benzoin isopropyl ether 10354-00-4, Dibenzosuberone 10373-78-1, Camphorquinone 13020-57-0, 3-Hydroxybenzophenone 15774-82-0, 2-Methylthioxanthone 17214-11-8 25620-59-1, Aminoanthraquinone 26708-04-3, 2-Ethyl-9,10-dimethoxyanthracene 27938-76-7, Hydroxyanthraquinone 30587-18-9, Anisoin 30637-95-7, Anthraquinonesulfonic acid 41295-28-7, 3,3'-Dimethyl-4-methoxybenzophenone 75081-21-9, Isopropylthioxanthone 76293-13-5, 2,4-Dimethylthioxanthone 79044-56-7 82799-44-8, 2,4-Diethylthioxanthone 83846-85-9, 4-Benzoyl-4'-methyl-diphenyl sulfide

182683-80-3 457652-97-0

RL: TEM (Technical or engineered material use); USES (Uses)  
(sensitizer; one-component photoresist compn. contg. cation-  
polymerizable substances, latent initiators, and sensitizers  
for electronic parts)

L45 ANSWER 13 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:607586 CAPLUS

DOCUMENT NUMBER: 137:177132

TITLE: Recording method and apparatus using ink  
composition and its reactive solution and  
records formed by them

INVENTOR(S): Miyabayashi, Toshiyuki

PATENT ASSIGNEE(S): Seiko Epson Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002225414	A2	20020814	JP 2001-20737	20010129
US 2003069329	A1	20030410	US 2002-56231	20020125
PRIORITY APPLN. INFO.:			JP 1999-217296	A 19990730
			JP 2000-7135	A 20000114
			JP 2000-211821	A 20000712
			JP 2000-222966	A 20000724
			JP 2000-224002	A 20000725
			JP 2000-224141	A 20000725
			WO 2000-JP5150	A1 20000731
			JP 2001-20737	A 20010129
			US 2001-806273	A2 20010328

AB The records such as characters, images, and designs are printed with the ink compn. and the reactive soln. on a recording material. The method or the app. comprises processes or devices for depositing the reactive soln. on the recording material, recording images by subsequently depositing the ink compn., controlling to record the images, and processing the recording material with a polar solvent. The ink compn. contains a colorant, emulsified resin particles, a water sol. org. solvent, and water. The reactive soln. contains a reacting agent forming agglomerates when contacted with the ink compn., cationic inorg. particles and/or cationic polymer particles, the water sol. org. solvent, and water. The method showed improved image fixability, abrasion resistance, and light stability, and can be printed on various materials such as industrial material, electronic device, food, and cloth.

IT 324575-80-6P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(ink compn.; ink-jet printing method)

using ink and reactive soln.)

RN 324575-80-6 CAPLUS  
 CN 2-Propenoic acid, 2-methyl-, 1,2-ethanediyl ester, polymer with  
 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate,  
 butyl 2-propenoate, ethenylbenzene, 1,2,2,6,6-pentamethyl-4-piperidiny  
 2-methyl-2-propenoate, 2-propenamide and 2-propenoic acid, ammonium salt  
 (9CI) (CA INDEX NAME)

CM 1

CRN 324575-79-3

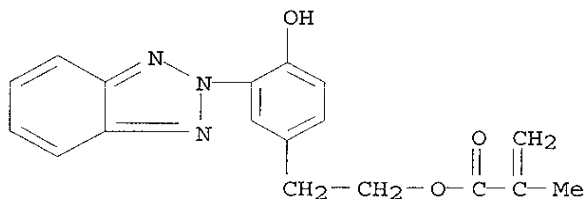
CMF (C18 H17 N3 O3 . C14 H25 N O2 . C10 H14 O4 . C8 H8 . C7 H12 O2 . C3  
 H5 N O . C3 H4 O2)x

CCI PMS

CM 2

CRN 96478-09-0

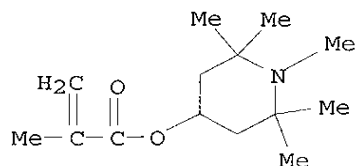
CMF C18 H17 N3 O3



CM 3

CRN 68548-08-3

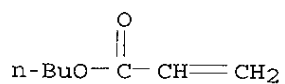
CMF C14 H25 N O2



CM 4

CRN 141-32-2

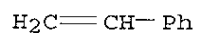
CMF C7 H12 O2



CM 5

CRN 100-42-5

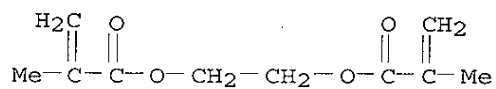
CMF C8 H8



CM 6

CRN 97-90-5

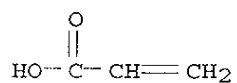
CMF C10 H14 O4



CM 7

CRN 79-10-7

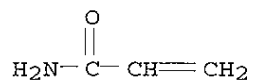
CMF C3 H4 O2



CM 8

CRN 79-06-1

CMF C3 H5 N O



IC ICM B41M005-00

KOROMA EIC1700

- ICS B41M005-00; B41J002-01; C09D011-00
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 38
- ST **ink jet printing reactive soln; cationic particle reactive soln agglomerate; resin emulsion colorant ink compn**
- IT Epoxy resins, uses  
Polyesters, uses  
Polysiloxanes, uses  
Polyurethanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(cationic, reactive soln. contg.; **ink-jet printing method using ink and reactive soln.**)
- IT **Ink-jet printing**  
(**ink-jet printing method using ink and reactive soln.**)
- IT Polyamides, uses  
Polyolefins  
RL: TEM (Technical or engineered material use); USES (Uses)  
(reactive soln. contg.; **ink-jet printing method using ink and reactive soln.**)
- IT 1344-28-1, Aluminasol 520, uses 7631-86-9, Snowtex AK, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(colloidal, reactive soln. contg; **ink-jet printing method using ink and reactive soln.**)
- IT 324575-87-3P 382140-73-0P 446862-67-5P  
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**ink compn.**, pigment dispersed with; **ink -jet printing method using ink and reactive soln.**)
- IT 7439-95-4DP, Magnesium, complex with acrylic **copolymer**  
75266-11-4DP, Acrylamide-butyl acrylate-glycidyl methacrylate-methacrylic acid-styrene **copolymer**, magnesium complex 277300-62-6P,  
Acrylamide-butyl acrylate-methacrylic acid-styrene **copolymer**  
ammonium salt 324575-80-6P 324576-24-1P  
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**ink compn.**; **ink-jet printing method using ink and reactive soln.**)
- IT 147-14-8, C.I. PigmentBlue 15:3 980-26-7, C.I. Pigment Red 122  
76199-85-4, C.I. Pigment Yellow 185  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**ink compn.**; **ink-jet printing method using ink and reactive soln.**)
- IT 324576-03-6P, Acrylamide-butyl acrylate-ethylene glycol dimethacrylate-heptadecafluorodecyl methacrylate-methacrylic acid-styrene **copolymer** ammonium salt  
RL: PNU (Preparation, unclassified); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**ink-jet printing method using ink and reactive soln.**)
- IT 35209-54-2, Acrylic acid-styrene **copolymer** ammonium salt

RL: TEM (Technical or engineered material use); USES (Uses)  
(**ink**-jet printing method using **ink** and reactive  
soln.)

IT 9003-17-2, Polybutadiene 9003-53-6, Polystyrene 9003-55-8,  
Butadiene-styrene **copolymer** 24937-78-8, Ethylene-vinyl acetate  
**copolymer**

RL: TEM (Technical or engineered material use); USES (Uses)  
(reactive soln. contg.; **ink**-jet printing method using  
**ink** and reactive soln.)

IT 220170-89-8P

RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(reactive soln. contg; **ink**-jet printing method using  
**ink** and reactive soln.)

IT 10377-60-3, Magnesium nitrate

RL: TEM (Technical or engineered material use); USES (Uses)  
(reactive soln. contg; **ink**-jet printing method using  
**ink** and reactive soln.)

L45 ANSWER 14 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:591687 CAPLUS

DOCUMENT NUMBER: 137:126594

TITLE: Protective layer transfer sheet with good fastness  
properties to an image in a print

INVENTOR(S): Saito, Hitoshi; Takao, Shino; Matsufuji, Yuji

PATENT ASSIGNEE(S): Dai Nippon Printing Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 30 pp.  
CODEN: EPXXDW

DOCUMENT TYPE: Patent

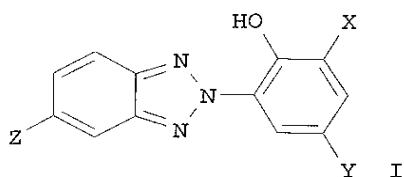
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1228894	A1	20020807	EP 2002-9268	19990826
R: DE, FR, GB				
JP 2000071619	A2	20000307	JP 1998-255998	19980826
JP 2000071626	A2	20000307	JP 1998-260848	19980831
EP 982150	A2	20000301	EP 1999-116712	19990826
EP 982150	A3	20000419		
EP 982150	B1	20021106		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			JP 1998-255998	A 19980826
			JP 1998-260848	A 19980831
			EP 1999-116712	A3 19990826
OTHER SOURCE(S):			MARPAT 137:126594	
GI				





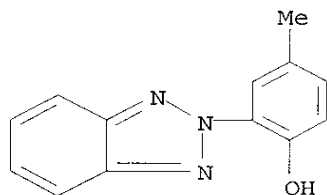
AB The sheet comprises a substrate sheet; and a thermally transferable protective layer provided on .gtoreq.1 part of one side of the substrate sheet, wherein the protective layer comprises a thermoplastic resin and an UV absorber, the UV absorber being a benzotriazole UV absorber of I (X, Y = C4-10 alkyl, aralkyl; Z = H, Cl), the content of the UV absorber in the protective layer being 10-40% by wt. There is still further provided a print comprising: a substrate; and, provided on .gtoreq.1 side of the substrate, a dye image and a protective layer covering at least a part of the image, the protective layer having been formed by transfer from the above protective layer transfer sheet. Thus, a coating for a protective layer was made from a copolymer of diethylene glycol, tricyclodecanedimethanol, cyclohexanedimethanol, terephthalic acid, and isophthalic acid 20, Tinuvin 234 10, and 1:1 MEH and toluene mixt. 80%.

IT 2440-22-4, 2-(2-Hydroxy-5-methylphenyl)benzotriazole  
 3846-71-7, 2-(2-Hydroxy-3,5-di-tert-butylphenyl)benzotriazole  
 3864-99-1, 2-(2-Hydroxy-3,5-di-tert-butylphenyl)-5-chloro-benzotriazole 25189-68-8, UVA 635L 70321-86-7, Tinuvin 234 84268-23-5

RL: MOA (Modifier or additive use); USES (Uses)  
 (UV absorbers; protective layer transfer sheet with good fastness properties to an image in a print)

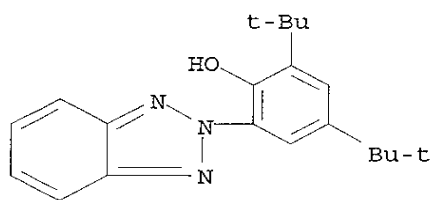
RN 2440-22-4 CAPLUS

CN Phenol, 2-(2H-benzotriazol-2-yl)-4-methyl- (9CI) (CA INDEX NAME)



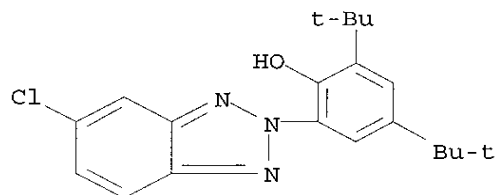
RN 3846-71-7 CAPLUS

CN Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RN 3864-99-1 CAPLUS

CN Phenol, 2-(5-chloro-2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)-  
(9CI) (CA INDEX NAME)



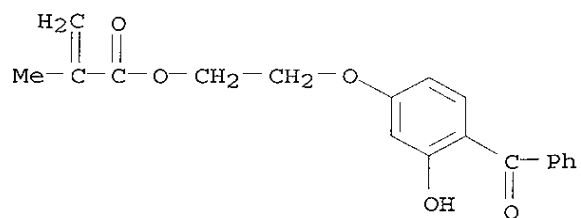
RN 25189-68-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester,  
polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 16613-04-0

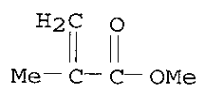
CMF C19 H18 O5



CM 2

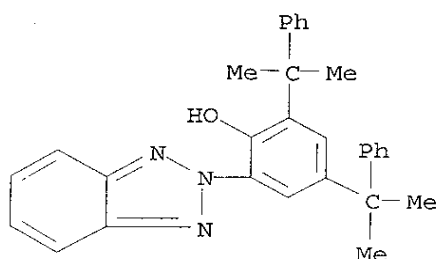
CRN 80-62-6

CMF C5 H8 O2



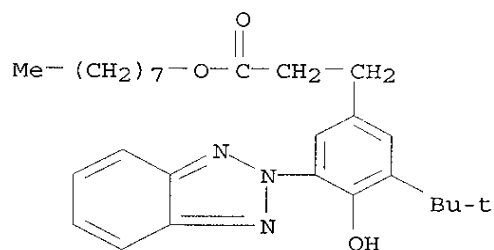
RN 70321-86-7 CAPLUS

CN Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)- (9CI)  
(CA INDEX NAME)



RN 84268-23-5 CAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, octyl ester (9CI) (CA INDEX NAME)



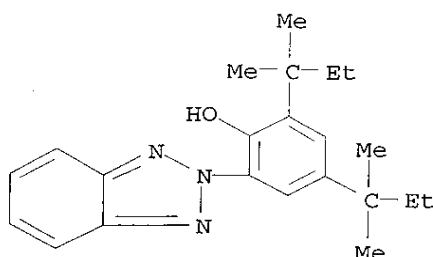
IT 25973-55-1, Tinuvin 328

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(UV absorbers; protective layer transfer sheet with good fastness properties to an image in a print)

RN 25973-55-1 CAPLUS

CN Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)- (9CI) (CA INDEX NAME)



- IC ICM B41M007-00  
 CC 42-13 (Coatings, Inks, and Related Products)  
 ST transfer sheet image printing; polyester benzotriazole UV absorber  
 protective layer  
 IT Polyvinyl acetals  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
 (acetoacetals, coating for protective layers; protective layer transfer  
 sheet with good fastness properties to an image in a print)  
 IT Polyesters, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (backside layered film; protective layer transfer sheet with good  
 fastness properties to an image in a print)  
 IT Polycarbonates, uses  
 Polyesters, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
 (coating for protective layers; protective layer transfer sheet with  
 good fastness properties to an image in a print)  
 IT Ionomers  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (coating for release layer; protective layer transfer sheet with good  
 fastness properties to an image in a print)  
 IT Epoxy resins, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (epoxy-contg. polysiloxane-, coating liq. for receptive  
 layer; protective layer transfer sheet with good fastness properties to  
 an image in a print)  
 IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (epoxy-contg., coating liq. for receptive layer; protective layer  
 transfer sheet with good fastness properties to an image in a print)  
 IT Polyvinyl butyrals  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink compn. for backside layer; protective layer  
 transfer sheet with good fastness properties to an image in a print)  
 IT Electrophotographic paper  
 Transfer printing  
 UV stabilizers  
 (protective layer transfer sheet with good fastness properties to an

image in a print)

IT Electrophotographic paper  
(receptor; protective layer transfer sheet with good fastness properties to an image in a print)

IT 2440-22-4, 2-(2-Hydroxy-5-methylphenyl)benzotriazole  
3846-71-7, 2-(2-Hydroxy-3,5-di-tert-butylphenyl)benzotriazole  
3864-99-1, 2-(2-Hydroxy-3,5-di-tert-butylphenyl)-5-chloro-benzotriazole 25189-68-8, UVA 635L 70321-86-7, Tinuvin 234 84268-23-5  
RL: MOA (Modifier or additive use); USES (Uses)  
(UV absorbers; protective layer transfer sheet with good fastness properties to an image in a print)

IT 25973-55-1, Tinuvin 328  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(UV absorbers; protective layer transfer sheet with good fastness properties to an image in a print)

IT 25038-59-9, PET polymer, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(backside layered film; protective layer transfer sheet with good fastness properties to an image in a print)

IT 9011-87-4, Dianal BR 75 30527-02-7 175284-08-9, Ethoxylated bisphenol A-isophthalic acid-terephthalic acid copolymer 232601-31-9, Diethylene glycol-isophthalic acid-terephthalic acid-tricyclodecanedimethanol copolymer 259094-10-5, Cyclohexanedimethanol-diethylene glycol-isophthalic acid-neopentyl glycol-terephthalic acid copolymer 259094-11-6, Cyclohexanedimethanol-diethylene glycol-isophthalic acid-terephthalic acid-tricyclodecanedimethanol copolymer 259094-12-7, Cyclohexanedicarboxylic acid-cyclohexanedimethanol-diethylene glycol-isophthalic acid-terephthalic acid copolymer 259094-14-9, Diethylene glycol-isophthalic acid-neopentyl glycol-sebacic acid-terephthalic acid copolymer  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(coating for protective layers; protective layer transfer sheet with good fastness properties to an image in a print)

IT 9003-53-6, Toporex 550-51 9011-14-7, Dianal BR 85  
RL: TEM (Technical or engineered material use); USES (Uses)  
(coating liq. for protective layer; protective layer transfer sheet with good fastness properties to an image in a print)

IT 9003-22-9, Denka Vinyl 1000A  
RL: TEM (Technical or engineered material use); USES (Uses)  
(coating liq. for receptive layer; protective layer transfer sheet with good fastness properties to an image in a print)

IT 160338-46-5, Burnock D 750-45  
RL: TEM (Technical or engineered material use); USES (Uses)  
(ink compn. for backside layer; protective layer transfer sheet with good fastness properties to an image in a print)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 15 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2002:573341 CAPLUS  
 DOCUMENT NUMBER: 137:116992  
 TITLE: Ink jet printing paper  
 INVENTOR(S): Matsumura, Kazuyuki; Yamamoto, Akira  
 PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 18 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1226971	A2	20020731	EP 2002-250434	20020122
EP 1226971	A3	20021211		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2002211120	A2	20020731	JP 2001-15372	20010124
US 2002136869	A1	20020926	US 2002-51115	20020122

PRIORITY APPLN. INFO.: JP 2001-15372 A 20010124

AB A printing paper sheet is provided in which cellulose fibers are coated with solids of a substantially org. solvent-free silicone resin emulsion compn., which is obtained by emulsion **polymn.** of a mixt. comprising (a) a water insol., silanol group-contg. silicone resin and/or a radical **polymerizable** vinyl group-contg. alkoxysilane and (b) a radical **polymerizable** vinyl monomer. The paper sheet in which cellulose fibers are coated with the acrylic silicone resin is minimized in deformation or stretching and contraction upon water absorption and thus suited for printing by an ink jet printer. The quality of printed image is equal to ordinary coated paper sheets.

IT 352304-64-4P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (coating material for ink-jet printing paper contg.)

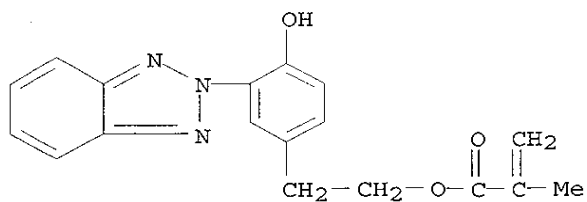
RN 352304-64-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 1,2,2,6,6-pentamethyl-4-piperidinyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

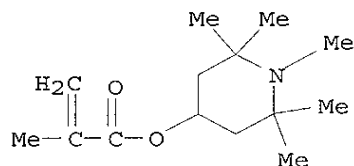
CMF C18 H17 N3 O3



CM 2

CRN 68548-08-3

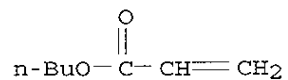
CMF C14 H25 N O2



CM 3

CRN 141-32-2

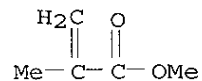
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



IC ICM B41M005-00

ICS D21H019-32; D21H017-59

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other

KOROMA EIC1700

- Reprographic Processes)  
Section cross-reference(s): 38
- ST **ink jet printing paper coating material acrylic polymer polysiloxane**
- IT **Polysiloxanes**, preparation  
Silsequioxanes  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(coating material for ink-jet printing paper contg.)
- IT **Ink-jet recording sheets**  
(paper; ink-jet printing paper coated with acrylic resin and silicone resin)
- IT **Acrylic polymers**, preparation  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(**polysiloxane-**; coating material for ink-jet printing paper contg.)
- IT **Paper**  
(printing, ink-jet; ink-jet printing paper coated with acrylic resin and silicone resin)
- IT 80-62-6D, Methyl methacrylate, **polymer** with Bu acrylate, glycidyl methacrylate and **polysiloxane** contg. methacryloxy group  
106-91-2D, Glycidyl methacrylate, **polymer** with Me methacrylate, Bu acrylate and **polysiloxane** contg. methacryloxy group  
141-32-2D, Butyl acrylate, **polymer** with Me methacrylate, glycidyl methacrylate and **polysiloxane** contg. methacryloxy group  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(coating material for ink-jet printing paper contg.)
- IT 25498-03-7P, Methyltrimethoxysilane **homopolymer** 27306-39-4DP, Methyl methacrylate-butyl acrylate-acrylic acid-styrene **copolymer**, r.p. with **polysiloxane** contg. glycidyl group 153315-80-1P  
195319-40-5DP, r.p. with **polymer** contg. acrylic acid  
207451-43-2P, Methyl methacrylate-butyl acrylate-Aqualon RN 20-Aqualon HS 10 **copolymer** 352304-64-4P 352304-69-9DP, **polymer** with Me methacrylate, Bu acrylate and glycidyl methacrylate 443311-71-5P, Methyl methacrylate-butyl acrylate-3-methacryloxypropylmethyldimethoxysilane-3-methacryloxypropyltrimethoxysilane **copolymer**  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(coating material for ink-jet printing paper contg.)

L45 ANSWER 16 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:517936 CAPLUS

DOCUMENT NUMBER: 137:85980

TITLE: **Ink-jet recording medium with porous**

structure and image fastness-improving method

INVENTOR(S): Ishikawa, Takayuki; Murai, Keiichi; Tajika, Hiroshi; Yamamoto, Takao

PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan

SOURCE: Eur. Pat. Appl., 52 pp.

CODEN: EPXXDW

KOROMA EIC1700



DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1221381	A2	20020710	EP 2001-130866	20011227
EP 1221381	A3	20030730		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AU 2001097493	A5	20020704	AU 2001-97493	20011228
CN 1367084	A	20020904	CN 2001-144086	20011228
JP 2003118228	A2	20030423	JP 2001-399710	20011228
PRIORITY APPLN. INFO.:			JP 2000-401317	A 20001228
			JP 2001-242752	A 20010809

OTHER SOURCE(S): MARPAT 137:85980

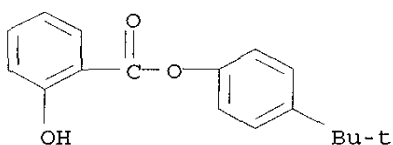
AB In order to provide a **ink-jet** recording medium having image fastness to **light** and gas, disclosed is a recording medium having an **ink-receiving** layer of a porous structure, wherein the **ink-receiving** layer has an image region where an image is formed with a **coloring** material, wherein the image region has a portion in which all or substantially all of the **coloring** material distributing in a thickness direction of the **ink-receiving** layer is embedded in a non-volatile liq. which does not dissolve the **coloring** material.

IT 87-18-3

RL: TEM (Technical or engineered material use); USES (Uses)  
 (**ink-jet** recording medium with porous structure comprising image fastness improving agent)

RN 87-18-3 CAPLUS

CN Benzoic acid, 2-hydroxy-, 4-(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



IC ICM B41M005-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST **inkjet** recording porous medium **light** gas fastness improving method

IT **Polysiloxanes**, uses

RL: TEM (Technical or engineered material use); USES (Uses)  
 (alkyl Me, di-Me, SF 8416; **ink-jet** recording medium with porous structure comprising image fastness improving agent)

IT **Polysiloxanes**, uses

KOROMA EIC1700

RL: TEM (Technical or engineered material use); USES (Uses)  
 (di-Me, Me 3,3,3-trifluoropropyl, FS 1265; ink-jet recording  
 medium with porous structure comprising image fastness improving agent)

IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (fluorine-contg.; ink-jet recording medium with porous  
 structure comprising image fastness improving agent)

IT Ink-jet recording sheets  
 (ink-jet recording medium with porous structure comprising  
 image fastness improving agent)

IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink-jet recording medium with porous structure comprising  
 image fastness improving agent)

IT Fluoropolymers, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (polysiloxane-; ink-jet recording medium with  
 porous structure comprising image fastness improving agent)

IT 87-18-3 1344-28-1, Alumina, uses 7299-99-2 7631-86-9,  
 Silicon oxide, uses 7727-43-7, Barium sulfate 9002-89-5, PVA 117  
 15196-52-8 41556-26-7, Tinuvin 292 42557-10-8, SH 200 97048-16-3,  
 Unister H 334R 100631-43-4, ADK Stab LA 67 107119-91-5, ADK Stab LA 62  
 110120-25-7, Unister C 3371A 122586-52-1, Tinuvin 123 151306-89-7  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink-jet recording medium with porous structure comprising  
 image fastness improving agent)

L45 ANSWER 17 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:449630 CAPLUS

DOCUMENT NUMBER: 137:34012

TITLE: Bis(alkyleneoxybenzophenone) ultraviolet light  
 absorbers for plastics

INVENTOR(S): Sassi, Thomas Patrick

PATENT ASSIGNEE(S): Cyttec Technology Corp., USA

SOURCE: PCT Int. Appl., 73 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002046136	A2	20020613	WO 2001-US51100	20011023
WO 2002046136	A3	20030116		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,  
 PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,  
 UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,  
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 US 6537670 B1 20030325 US 2000-705657 20001103  
 AU 2002041774 A5 20020618 AU 2002-41774 20011023  
 EP 1335894 A2 20030820 EP 2001-988471 20011023

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.: US 2000-705657 A 20001103  
 WO 2001-US51100 W 20011023

OTHER SOURCE(S): MARPAT 137:34012

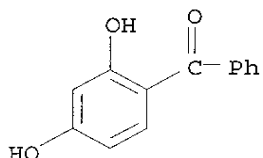
AB The title compds. are particularly useful, either alone or in combination with other additives, including other UV light absorbers, antioxidants and stabilizers in stabilizing polymers and other materials from degrdn. by environmental forces such as actinic radiation (UV light), oxidn., moisture, atm. pollutants and combinations. Thus, 25.8 g 2-hydroxy-4-(hydroxyethoxy)benzophenone (Cyasorb UV 198), 63 g di-Me carbonate, 0.63 g sodium methoxide, and 100 mL mixed xylenes, heated to a bath temp. starting at 100.degree. and increasing to 128.degree. for 10 h, over which time 52 g of solvent distd. off, addnl. portions of the Cyasorb UV-198 and xylenes were added until little or no intermediate mixed carbonate was present, the org. soln. was washed, and recrystd. from 38 g MEK giving 29.0 g (73% yield) [2-(3-hydroxy-4-benzoylphenoxy)ethyl] carbonate, melting at 126-128.degree..

IT 131-56-6, 2,4-Dihydroxybenzophenone 16909-78-7,  
 2-Hydroxy-4-(2-hydroxyethoxy)benzophenone 88794-55-2

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (Bis(alkyleneoxybenzophenone) UV light absorbers for plastics)

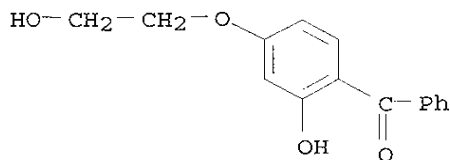
RN 131-56-6 CAPLUS

CN Methanone, (2,4-dihydroxyphenyl)phenyl- (9CI) (CA INDEX NAME)



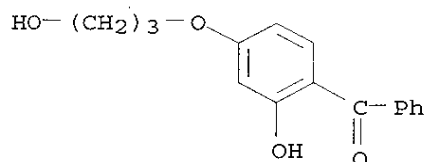
RN 16909-78-7 CAPLUS

CN Methanone, [2-hydroxy-4-(2-hydroxyethoxy)phenyl]phenyl- (9CI) (CA INDEX NAME)



KOROMA EIC1700

RN 88794-55-2 CAPLUS  
 CN Methanone, [2-hydroxy-4-(3-hydroxypropoxy)phenyl]phenyl- (9CI) (CA INDEX NAME)



IC ICM C07C069-96  
 ICS C07C068-06; C07C067-03; C08K005-132; C07C049-84; C07C069-36  
 CC 37-6 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 23  
 ST UV light absorber bisalkyleneoxybenzophenone plastic;  
 hydroxybenzoylphenoxyethyl carbonate UV light absorber  
 IT UV stabilizers  
 (Bis(alkyleneoxybenzophenone) UV light absorbers for  
 plastics)  
 IT Alkyd resins  
 Aminoplasts  
 Epoxy resins, uses  
 Natural rubber, uses  
 Phenolic resins, uses  
 Polyamides, uses  
 Polycarbonates, uses  
 Polyesters, uses  
 Polyethers, uses  
 Polyimides, uses  
 Polyketones  
 Polyolefins  
 Polyoxymethylenes, uses  
 Polysiloxanes, uses  
 Polysulfones, uses  
 Polyurethanes, uses  
 Synthetic rubber, uses  
 RL: POF (Polymer in formulation); USES (Uses)  
 (Bis(alkyleneoxybenzophenone) UV light absorbers for  
 plastics)  
 IT Cosmetics  
 Dyes  
 Inks  
 Paper  
 Photographic films  
 (Bis(alkyleneoxybenzophenone) UV light absorbers for plastics  
 and)  
 IT Polyimides, uses  
 RL: POF (Polymer in formulation); USES (Uses)

(polyamide-; Bis(alkyleneoxybenzophenone) UV light absorbers for plastics)

IT Polyimides, uses  
Polysulfones, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(polyether-; Bis(alkyleneoxybenzophenone) UV light absorbers for plastics)

IT Polyamides, uses  
Polyethers, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(polyimide-; Bis(alkyleneoxybenzophenone) UV light absorbers for plastics)

IT Polyethers, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(polysulfone-; Bis(alkyleneoxybenzophenone) UV light absorbers for plastics)

IT 436147-72-7P 436147-73-8P 436147-74-9P  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(Bis(alkyleneoxybenzophenone) UV light absorbers for plastics)

IT 9002-86-2, Polyvinylchloride 9003-08-1, Melamine/formaldehyde copolymer 9003-17-2, Polybutadiene 9003-35-4, Phenol/formaldehyde copolymer 9003-53-6, Polystyrene 9003-54-7, Acrylonitrile-styrene copolymer 9003-56-9, ABS 9004-36-8, Cellulose acetate butyrate 9011-05-6, Urea/formaldehyde copolymer 24936-68-3, Lexan 105, uses 25014-41-9, Polyacrylonitrile 25037-45-0 436811-26-6, Lexan 121-112  
RL: POF (Polymer in formulation); USES (Uses)  
(Bis(alkyleneoxybenzophenone) UV light absorbers for plastics)

IT 131-56-6, 2,4-Dihydroxybenzophenone 553-90-2, Dimethyl oxalate 616-38-6, Dimethyl carbonate 623-97-2, Bis(2-chloroethyl) carbonate 16909-78-7, 2-Hydroxy-4-(2-hydroxyethoxy)benzophenone 28064-81-5, Chloropropanol 88794-55-2  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(Bis(alkyleneoxybenzophenone) UV light absorbers for plastics)

L45 ANSWER 18 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:293904 CAPLUS

DOCUMENT NUMBER: 136:318027

TITLE: Metalized film, method for the production thereof, and its use especially for radio frequency antennas or transponders

INVENTOR(S): Kastner, Friedrich; Bergsmann, Martin; Hillburger, Johann; Einsiedler, Ronald; Treutlein, Roland

PATENT ASSIGNEE(S): Hueck Folien, Austria

SOURCE: PCT Int. Appl., 36 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

KOROMA EIC1700

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002031214	A1	20020418	WO 2001-DE3040	20010809
W: BR, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
EP 1332238	A1	20030806	EP 2001-960161	20010809
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				

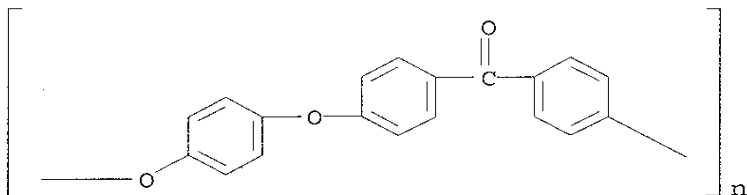
PRIORITY APPLN. INFO.:  
DE 2000-20017392 U 20001009  
WO 2001-DE3040 W 20010809

AB The invention relates to a partially vapor deposited metalized film, to a metalized film that is conformally vapor deposited, and to a metalized film that has been coated a no. of times. The invention also relates to a method for producing a partially vapor-deposited metalized film, a metalized film that is conformally vapor deposited, and a metalized film that has been coated a no. of times. The inventive method is characterized in that either a structure is pressed onto a substrate or onto a supporting film with a sol. **ink** (washable **ink**), or the base materials are directly cleaned in a vacuum by means of plasma processing and are simultaneously subjected to a nucleation with target atoms. A metal or the like is vapor deposited thereon, followed by prodn. of the structured layer. This metalized film is used, e.g., as a radio frequency antenna for transponders and the like.

IT 31694-16-3, PEEK  
RL: TEM (Technical or engineered material use); USES (Uses)  
(foil; metalized film, method for prodn. thereof, and use esp. for radio frequency antennas or transponders)

RN 31694-16-3 CAPLUS

CN Poly(oxy-1,4-phenyleneoxy-1,4-phenylenecarbonyl-1,4-phenylene) (9CI) (CA INDEX NAME)



IC ICM C23C014-02

ICS C23C014-04; H05K003-04

CC 76-11 (Electric Phenomena)

Section cross-reference(s): 74

ST foil vapor deposition process metalization antenna

IT Liquid crystals, **polymeric**

(foil; metalized film, method for prodn. thereof, and use esp. for

- radio frequency antennas or transponders)
- IT Fluoropolymers, uses  
Polyamides, uses  
Polycarbonates, uses  
Polyesters, uses  
Polyimides, uses  
Polyketones  
Polyoxymethylenes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(foil; metalized film, method for prodn. thereof, and use esp. for  
radio frequency antennas or transponders)
- IT Vapor deposition process  
(metalization; metalized film, method for prodn. thereof, and use esp.  
for radio frequency antennas or transponders)
- IT Antennas  
Foils  
Galvanizing  
(metalized film, method for prodn. thereof, and use esp. for radio  
frequency antennas or transponders)
- IT Vapor deposition process  
(plasma; metalized film, method for prodn. thereof, and use esp. for  
radio frequency antennas or transponders)
- IT Polyketones  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polyether-, arom., foil; metalized film, method for prodn. thereof,  
and use esp. for radio frequency antennas or transponders)
- IT Polysiloxanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polyether-polyurethane-, foil; metalized film, method for prodn.  
thereof, and use esp. for radio frequency antennas or transponders)
- IT Polyurethanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polyether-siloxane-, foil; metalized film, method for prodn.  
thereof, and use esp. for radio frequency antennas or transponders)
- IT Polyethers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polyketone-, arom., foil; metalized film, method for prodn. thereof,  
and use esp. for radio frequency antennas or transponders)
- IT Cycloalkenes  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polymers, foil; metalized film, method for prodn. thereof,  
and use esp. for radio frequency antennas or transponders)
- IT Polyurethanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polysiloxane-, foil; metalized film, method for prodn.  
thereof, and use esp. for radio frequency antennas or transponders)
- IT Polysiloxanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polyurethane-, foil; metalized film, method for prodn. thereof, and  
use esp. for radio frequency antennas or transponders)
- IT Polyethers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)

(polyurethane-siloxane-, foil; metalized film, method for prodn. thereof, and use esp. for radio frequency antennas or transponders)

IT Polyurethanes, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(thermoplastic, foil; metalized film, method for prodn. thereof, and use esp. for radio frequency antennas or transponders)

IT 1332-29-2, Tin oxide

RL: TEM (Technical or engineered material use); USES (Uses)

(fluorine-doped; metalized film, method for prodn. thereof, and use esp. for radio frequency antennas or transponders)

IT 9002-84-0, PTFE 9002-86-2, PVC 9002-88-4, Polyethylene 9002-98-6, PEI 9003-07-0, Polypropylene 9003-56-9, ABS 24968-11-4, PEN 24968-12-5, PBT 25038-59-9, PET, uses 25212-74-2, PPS 25640-14-6, PETG 27380-27-4, PEK 31694-16-3, PEEK 65324-12-1, ETFE 164721-64-6, OPET

RL: TEM (Technical or engineered material use); USES (Uses)

(foil; metalized film, method for prodn. thereof, and use esp. for radio frequency antennas or transponders)

IT 1314-13-2, Zinc oxide, uses 1314-98-3, Zinc sulfide, uses 1344-28-1, Alumina, uses 7429-90-5, Aluminum, uses 7439-89-6, Iron, uses 7440-02-0, Nickel, uses 7440-22-4, Silver, uses 7440-32-6, Titanium, uses 7440-47-3, Chromium, uses 7440-50-8, Copper, uses 7440-66-6, Zinc, uses 7631-86-9, Silica, uses 11099-19-7 11118-57-3, Chromium oxide 11143-56-9 12673-86-8, Antimony tin oxide 13463-67-7, Titania, uses 50926-11-9, Indium tin oxide

RL: TEM (Technical or engineered material use); USES (Uses)

(metalized film, method for prodn. thereof, and use esp. for radio frequency antennas or transponders)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 19 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:568291 CAPLUS

DOCUMENT NUMBER: 135:160164

TITLE: Emulsion composition for protective layer on printed product, protective sheet using the composition, and method for protecting surface of printed product

INVENTOR(S): Furunaga, Toshikatsu; Tanaka, Masayoshi; Matsumura, Kazuyuki

PATENT ASSIGNEE(S): Space Environmental Technology Co., Inc., Japan; Shin-Etsu Chemical Industry Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001213060	A2	20010807	JP 2000-24472	20000201



PRIORITY APPLN. INFO.:

JP 2000-24472

20000201

AB The compn. is made of an emulsion prepd. from a mixt. of 100 parts water-insol.  $R_1mR_2nSi(OH)p(OX)qO(4-m-n-p-q)/2$  ( $R_1 = C1-10$  alkyl, alkenyl, aryl;  $R_2 = C1-10$  substituted alkyl, alkenyl, aryl;  $X = C1-6$  alkyl, alkenyl, aryl;  $m = 0.50-1.80$ ;  $n = 0-1.00$ ;  $0 < p \leq 1.50$ ;  $q = 0-0.50$ ;  $m + n = 0.50-1.80$ ;  $0 < p + q \leq 1.50$ ) and 10-1000 parts radically polymerizable vinyl monomers by emulsion polymn. The protective sheet consists of a releasing material and a protective layer made of org. solvent-free emulsion prepd. by emulsion polymn. of the above monomer mixt. The printed product is protected by placing the above sheet on the printed surface so that the protective layer is stuck on the printed surface and removing the releasing layer from the sheet. The protective layer shows good water, scratch, and light resistance and good adhesion to the printed surface.

IT 352304-64-4P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (emulsion prepd. from mixt. of silanol-contg. siloxane and vinyl monomer for protective layer on printed product)

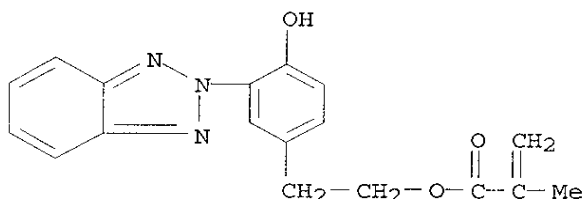
RN 352304-64-4 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl ester, polymer with butyl 2-propenoate, methyl 2-methyl-2-propenoate and 1,2,2,6,6-pentamethyl-4-piperidiny 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0

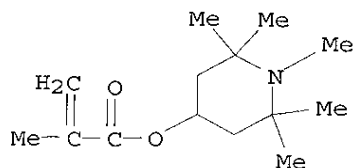
CMF C18 H17 N3 O3



CM 2

CRN 68548-08-3

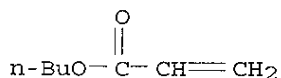
CMF C14 H25 N O2



CM 3

CRN 141-32-2

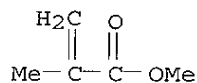
CMF C7 H12 O2



CM 4

CRN 80-62-6

CMF C5 H8 O2



- IC ICM B41M007-00  
ICS B41J002-01; B41M005-00; C08F002-44; C08J005-18; C09D151-08
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 38
- ST **siloxane** emulsion protecting layer printed surface; silanol emulsion **polymer** protecting film; org solvent free emulsion protecting layer
- IT Emulsions  
(emulsion prepd. from mixt. of silanol-contg. **siloxane** and vinyl monomer for protective layer on printed product)
- IT **Polysiloxanes**, preparation  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(emulsion prepd. from mixt. of silanol-contg. **siloxane** and vinyl monomer for protective layer on printed product)
- IT **Light-resistant materials**  
Water-resistant materials  
(emulsion prepd. from mixt. of silanol-contg. **siloxane** and

- vinyl monomer for protective sheet for printed surface)
- IT Discoloration prevention  
(of emulsion prepd. from mixt. of silanol-contg. **siloxane** and vinyl monomer for protective sheet for printed surface)
- IT Ink-jet printing  
(receptors; emulsion prepd. from mixt. of silanol-contg. **siloxane** and vinyl monomer for protective sheet for)
- IT Polyesters, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(releasing layer; emulsion prepd. from mixt. of silanol-contg. **siloxane** and vinyl monomer for protective sheet having)
- IT 25498-03-7P, Methyltrimethoxysilane **homopolymer** 153315-80-1P, Methyltrimethoxysilane **homopolymer**, sru 207451-43-2P, Aqualon HS 10-Aqualon RN 20-butyl acrylate-methyl methacrylate **copolymer** 352304-64-4P  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(emulsion prepd. from mixt. of silanol-contg. **siloxane** and vinyl monomer for protective layer on printed product)
- IT 80-62-6DP, Methyl methacrylate, **polymer** with glycidyl methacrylate, methyltrimethoxysilane **polymer**, and acryl-terminated **dimethylsiloxane** 106-91-2DP, Glycidyl methacrylate, **polymer** with acrylic monomer, methyltrimethoxysilane **polymer**, and acryl-terminated **dimethylsiloxane** 141-32-2DP, Butyl acrylate, **polymer** with glycidyl methacrylate, methyltrimethoxysilane **polymer**, and acryl-terminated **dimethylsiloxane** 9016-00-6DP, **Dimethylsiloxane**, acryl-terminated, reaction product with glycidyl methacrylate, acrylic monomers, and methyltrimethoxysilane **polymer** 31900-57-9DP, **Dimethylsilanediol homopolymer**, acryl-terminated, reaction product with glycidyl methacrylate, acrylic monomers, and methyltrimethoxysilane **polymer** 278170-09-5P, Butyl acrylate-glycidyl methacrylate-3-methacryloyloxypropyltrimethoxysilane-methyl methacrylate-methyltrimethoxysilane **copolymer** 352304-68-8P 352304-69-9DP, reaction product with glycidyl methacrylate, acrylic monomers, and acryl-terminated **dimethylsiloxane**  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(emulsion prepd. from mixt. of silanol-contg. **siloxane** and vinyl monomer for protective layer on printed product)
- IT 25038-59-9, PET (polyester), uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(releasing layer; emulsion prepd. from mixt. of silanol-contg. **siloxane** and vinyl monomer for protective sheet having)

L45 ANSWER 20 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2001:479504 CAPLUS  
DOCUMENT NUMBER: 135:77938  
TITLE: Benzotriazole UV absorber-coated decorative materials  
with excellent weather resistance  
INVENTOR(S): Chihara, Kenshiro; Tone, Tetsuya  
PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001179899	A2	20010703	JP 1999-365951	19991224

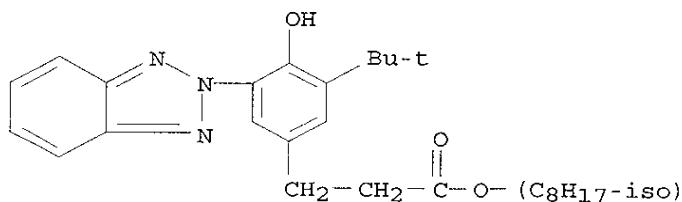
PRIORITY APPLN. INFO.: JP 1999-365951 19991224

AB The materials, useful for construction materials, furniture, elec. appliances, etc., have surface layers contg. crosslinked acrylic polyurethanes (derived from acrylic polyols and aliph. and/or alicyclic isocyanates) and isooctyl 3-[3-(2H-benzotriazol-2-yl)-5-tert-butyl-4-hydroxyphenyl]propionate (I). Thus, a thermoplastic propylene elastomer sheet was gravure-printed with an ink (based on 2-hydroxyethyl methacrylate-Me methacrylate copolymer and 1,6-hexamethylene diisocyanate), laminated with a butene-ethylene-propylene elastomer sheet, embossed, and coated with a coating (based on 2-hydroxyethyl methacrylate-Me methacrylate copolymer and 1,6-hexamethylene diisocyanate) contg. 2% I and 1% dimethylsiloxane slip agent to give a test piece showing good interlayer adhesion after accelerated weathering for 120 h and scratch resistance.

IT 131747-52-9  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (UV absorber; scratch- and weather-resistance multilayer decorative materials coated with UV absorber-contg. acrylic polyurethanes)

RN 131747-52-9 CAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, isooctyl ester (9CI) (CA INDEX NAME)



IC ICM B32B027-18  
 ICS B27D001-04; B27D005-00; B27M003-00; B32B027-40; B32B033-00;  
 B44C003-02; B44D005-00

CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 58

ST weather resistance decorative laminate isooctyl  
 benzotriazolylbutylhydroxyphenylpropionate; benzotriazole UV absorber  
 silicone coating; scratch resistance acrylic polyurethane adhesion  
 polyolefin

IT Polyurethanes, uses

- RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(acrylic, ink or coating layer; scratch- and weather-resistance multilayer decorative materials coated with UV absorber-contg. acrylic polyurethanes)
- IT Polyolefin rubber  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(butene-ethylene-propene; scratch- and weather-resistance multilayer decorative materials coated with UV absorber-contg. acrylic polyurethanes)
- IT Construction materials  
(decorative sheets, multilayer; scratch- and weather-resistance multilayer decorative materials coated with UV absorber-contg. acrylic polyurethanes)
- IT Laminated plastics, uses  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(decorative; scratch- and weather-resistance multilayer decorative materials coated with UV absorber-contg. acrylic polyurethanes)
- IT Styrene-butadiene rubber, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(hydrogenated, propylene copolymer blend, thermoplastic; scratch- and weather-resistance multilayer decorative materials coated with UV absorber-contg. acrylic polyurethanes)
- IT Lubricants  
UV stabilizers  
(scratch- and weather-resistance multilayer decorative materials coated with UV absorber-contg. acrylic polyurethanes)
- IT Coating materials  
(scratch- and weather-resistant; scratch- and weather-resistance multilayer decorative materials coated with UV absorber-contg. acrylic polyurethanes)
- IT Polysiloxanes, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(slip agent; scratch- and weather-resistance multilayer decorative materials coated with UV absorber-contg. acrylic polyurethanes)
- IT 131747-52-9  
RL: MOA (Modifier or additive use); USES (Uses)  
(UV absorber; scratch- and weather-resistance multilayer decorative materials coated with UV absorber-contg. acrylic polyurethanes)
- IT 115-07-1D, Propylene, polymers  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(hydrogenated SB rubber blend, thermoplastic; scratch- and weather-resistance multilayer decorative materials coated with UV absorber-contg. acrylic polyurethanes)
- IT 81546-20-5, 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with 1,6-diisocyanatohexane and methyl 2-methyl-2-propenoate  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or

engineered material use); USES (Uses)  
 (ink or coating layer; scratch- and weather-resistance  
 multilayer decorative materials coated with UV absorber-contg. acrylic  
 polyurethanes)

IT 9016-00-6, Dimethylsiloxane

RL: MOA (Modifier or additive use); USES (Uses)  
 (slip agent; scratch- and weather-resistance multilayer decorative  
 materials coated with UV absorber-contg. acrylic polyurethanes)

IT 9003-55-8

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or  
 engineered material use); USES (Uses)  
 (styrene-butadiene rubber, hydrogenated, propylene copolymer  
 blend, thermoplastic; scratch- and weather-resistance multilayer  
 decorative materials coated with UV absorber-contg. acrylic  
 polyurethanes)

L45 ANSWER 21 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:407802 CAPLUS

DOCUMENT NUMBER: 135:20960

TITLE: Organic solvent compositions in wet transfer process  
 and process of transfer films for exterior materials

INVENTOR(S): Koh, Hyun Joo; Koh, Hyun Woong

PATENT ASSIGNEE(S): Yemoon Tech Co., Ltd., S. Korea

SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001150889	A2	20010605	JP 2000-296505	20000928
KR 2000023917	A	20000506	KR 1999-41615	19990928
US 6428647	B1	20020806	US 2000-668470	20000925

PRIORITY APPLN. INFO.: KR 1999-41615 A 19990928

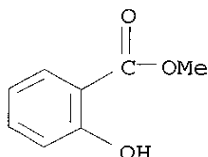
AB Title compns. comprise MEK 10-60, xylene 10-50, ethylene glycol mono-Bu  
 ether (I) 10-50, and isophorone (II) or Me salicylate 5-20%. Brushing a  
 mixt. of MEK 30, p-xylene 30, I 30, and II 10% on the uneven surface of an  
 Al plate, pressing the plate into a tank contg. water and a transfer film,  
 washing, and drying gave a designed plate with pencil hardness 3H and 60%  
 gloss 30% at a prodn. rate of 1,800 m2/day.

IT 119-36-8, Methyl salicylate

RL: NUU (Other use, unclassified); USES (Uses)  
 (specific org. solvent compns. for wet-transfer process for exterior  
 materials)

RN 119-36-8 CAPLUS

CN Benzoic acid, 2-hydroxy-, methyl ester (9CI) (CA INDEX NAME)



- IC ICM B44C001-175
- ICS B41M001-40; B41M003-12; B44C001-24
- CC 42-2 (Coatings, Inks, and Related Products)
- Section cross-reference(s): 38, 43
- ST MEK xylene org solvent compn wet transfer process; ethylene glycol monobutyl ether org solvent wet transfer process; isophorone org solvent wet transfer process; methyl salicylate org solvent wet transfer process
- IT Pigments, nonbiological
  - (ceramic, inks; specific org. solvent compns. for wet-transfer process for exterior materials)
- IT Antistatic agents
- Glues
  - (in coating, on pulp sheets, transfer films from; specific org. solvent compns. for wet-transfer process for exterior materials)
- IT Soaps
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (in coating, on pulp sheets, transfer films from; specific org. solvent compns. for wet-transfer process for exterior materials)
- IT Fluoropolymers, uses
  - RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
  - (inks; specific org. solvent compns. for wet-transfer process for exterior materials)
- IT Polysiloxanes, uses
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (oil, in coating, on pulp sheets, transfer films from; specific org. solvent compns. for wet-transfer process for exterior materials)
- IT Cellulose pulp
  - (sheets, transfer film base; specific org. solvent compns. for wet-transfer process for exterior materials)
- IT Coating process
  - (transfer, wet; specific org. solvent compns. for wet-transfer process for exterior materials)
- IT 9002-89-5, Poly(vinyl alcohol)
  - RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)
  - (aq. coating, on pulp sheets, transfer films from; specific org. solvent compns. for wet-transfer process for exterior materials)
- IT 57-50-1, Sugar, uses 9005-25-8, Starch, uses
  - RL: MOA (Modifier or additive use); USES (Uses)
  - (in coating, on pulp sheets, transfer films from; specific org. solvent compns. for wet-transfer process for exterior materials)
- IT 78-59-1, Isophorone 78-93-3, MEK, uses 106-42-3, p-Xylene, uses

111-76-2, Ethylene glycol monobutyl ether 119-36-8, Methyl salicylate 1330-20-7, Xylene, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (specific org. solvent compns. for wet-transfer process for exterior materials)

IT 7429-90-5, Aluminum, miscellaneous  
 RL: MSC (Miscellaneous)  
 (substrates; specific org. solvent compns. for wet-transfer process for exterior materials)

L45 ANSWER 22 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2001:360083 CAPLUS

DOCUMENT NUMBER: 134:367716

TITLE: Mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics

INVENTOR(S): Valentine, Donald H., Jr.; Jakiela, Dennis J.; Sassi, Thomas P.; Stephen, John F.

PATENT ASSIGNEE(S): Cytec Technology Corp., USA

SOURCE: PCT Int. Appl., 102 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001034694	A1	20010517	WO 2000-US30946	20001110
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6344505	B1	20020205	US 1999-438754	19991111
EP 1238003	A1	20020911	EP 2000-978503	20001110
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			

PRIORITY APPLN. INFO.: US 1999-438754 A 19991111  
 WO 2000-US30946 W 20001110

OTHER SOURCE(S): MARPAT 134:367716

AB A photostabilizer compn. contains a mono- or bis-benzotriazole compd., an N-oxide, or a mixt. of .gtoreq.2 of these compds. Representative bisbenzotriazole compds. include 3,3'-bis(2H-benzotriazol-2-yl)-5,5'-di-tert-octyl-1,1'-biphenyl-2,2'-diol (I). Representative mono-benzotriazole compds. include 3-(2H-benzotriazol-2-yl)-5,5'-di-tert-octyl-1,1'-biphenyl-2,2'-diol. These benzotriazole compds. are made by oxidative dimerization of the corresponding monomeric benzotriazole or by reductive cyclization of the corresponding azo compd. Profax 6301 contg. 0.5% I (prepn. given)



was exposed in a weather-o-meter to UV light showing 0.5 carbonyl intensity change after 900 h; vs. 140 h without stabilizer. These stabilizers are effective for the polycarbonate, polyester, polyethylene, polypropylene, polystyrene, polyacrylate, polyamide, polyurethane, and aminoresin-crosslinked polymers.

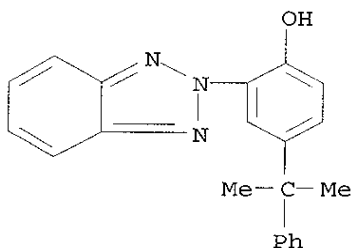
IT 15989-00-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(in prepn. of benzotriazolyldihydroxybiaryl UV absorbers)

RN 15989-00-1 CAPLUS

CN Phenol, 2-(2H-benzotriazol-2-yl)-4-(1-methyl-1-phenylethyl)- (9CI) (CA INDEX NAME)



IT 2440-22-4, 2-(2H-Benzotriazol-2-yl)-4-methylphenol

3147-75-9 3147-76-0 10096-91-0,

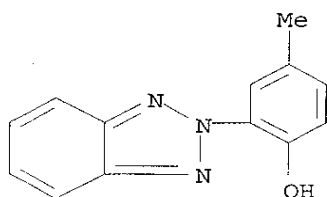
2-(2H-Benzotriazol-2-yl)phenol

RL: RCT (Reactant); RACT (Reactant or reagent)

(in prepn. of benzotriazolyldihydroxybiaryl UV absorbers)

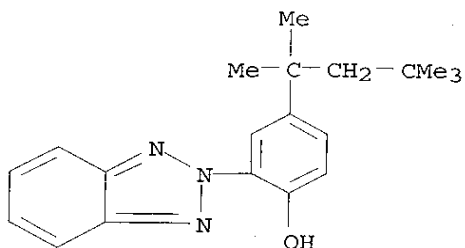
RN 2440-22-4 CAPLUS

CN Phenol, 2-(2H-benzotriazol-2-yl)-4-methyl- (9CI) (CA INDEX NAME)

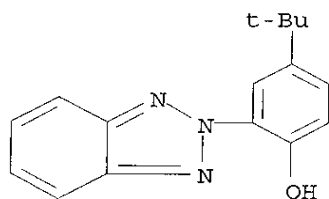


RN 3147-75-9 CAPLUS

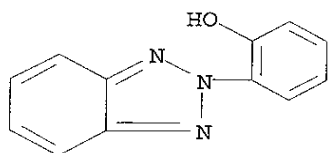
CN Phenol, 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)- (7CI, 8CI, 9CI) (CA INDEX NAME)



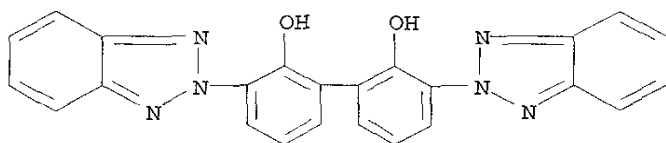
RN 3147-76-0 CAPLUS  
CN Phenol, 2-(2H-benzotriazol-2-yl)-4-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RN 10096-91-0 CAPLUS  
CN Phenol, 2-(2H-benzotriazol-2-yl)- (9CI) (CA INDEX NAME)

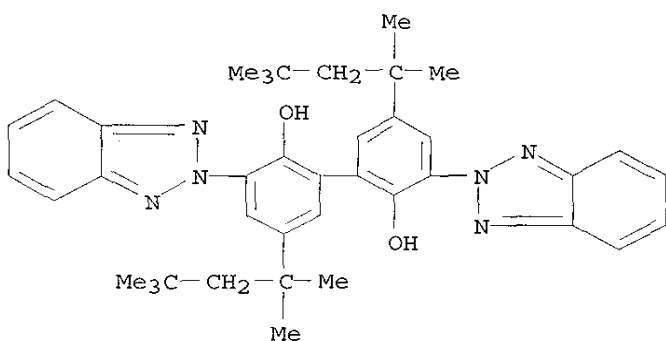


IT 317384-41-1P 340006-57-7P 340006-58-8P  
340006-60-2P 340006-61-3P 340006-77-1P  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP  
(Preparation); USES (Uses)  
(nonyellowing nonblooming mono- and bis- benzotriazolyldihydroxybiaryl  
UV absorbers for plastics)  
RN 317384-41-1 CAPLUS  
CN [1,1'-Biphenyl]-2,2'-diol, 3,3'-bis(2H-benzotriazol-2-yl)- (9CI) (CA  
INDEX NAME)



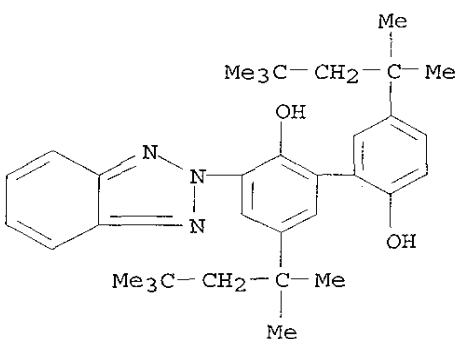
RN 340006-57-7 CAPLUS

CN [1,1'-Biphenyl]-2,2'-diol, 3,3'-bis(2H-benzotriazol-2-yl)-5,5'-bis(1,1,3,3-tetramethylbutyl)- (9CI) (CA INDEX NAME)



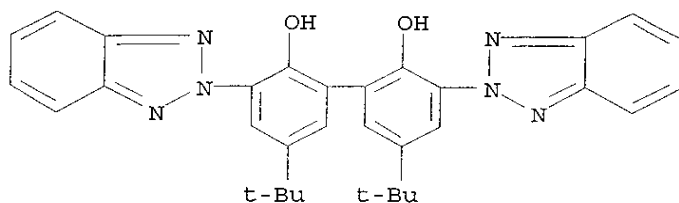
RN 340006-58-8 CAPLUS

CN [1,1'-Biphenyl]-2,2'-diol, 3-(2H-benzotriazol-2-yl)-5,5'-bis(1,1,3,3-tetramethylbutyl)- (9CI) (CA INDEX NAME)



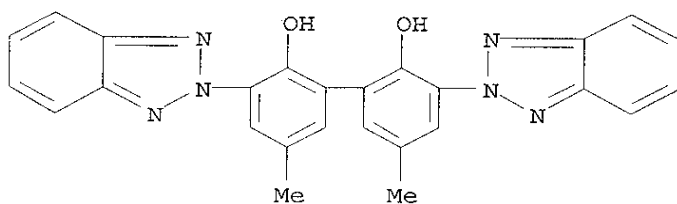
RN 340006-60-2 CAPLUS

CN [1,1'-Biphenyl]-2,2'-diol, 3,3'-bis(2H-benzotriazol-2-yl)-5,5'-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



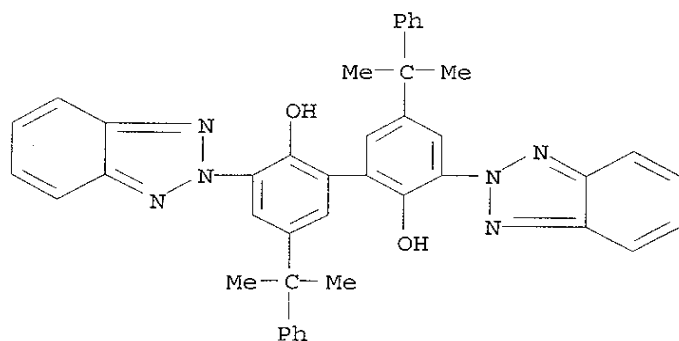
RN 340006-61-3 CAPLUS

CN [1,1'-Biphenyl]-2,2'-diol, 3,3'-bis(2H-benzotriazol-2-yl)-5,5'-dimethyl-  
(9CI) (CA INDEX NAME)



RN 340006-77-1 CAPLUS

CN [1,1'-Biphenyl]-2,2'-diol, 3,3'-bis(2H-benzotriazol-2-yl)-5,5'-bis(1-methyl-1-phenylethyl)- (9CI) (CA INDEX NAME)



IC ICM C08K005-3475

ICS C07D249-20

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 28, 42

ST benzotriazolyldihydroxybiaryl UV stabilizer polymer;  
nitroarylazobiaryldiol reductive cyclization UV stabilizer

IT Coating materials

Cosmetics

Inks

KOROMA EIC1700

- (nonyellowing nonblooming mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for)
- IT Polymer blends  
RL: TEM (Technical or engineered material use); USES (Uses)  
(nonyellowing nonblooming mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for)
- IT UV stabilizers  
(nonyellowing nonblooming mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics)
- IT Alkyd resins  
Aminoplasts  
Epoxy resins, uses  
Phenolic resins, uses  
Polyamides, uses  
Polyesters, uses  
Polyethers, uses  
Polyimides, uses  
Polyketones  
Polyoxymethylenes, uses  
Polysiloxanes, uses  
Polysulfones, uses  
Polyurethanes, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(nonyellowing nonblooming mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics)
- IT Polycarbonates, properties  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(nonyellowing nonblooming mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics)
- IT Dimerization  
(oxidative; of benzotriazole deriv. for prepg.  
benzotriazolyldihydroxybiaryl UV absorbers)
- IT Polyimides, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(polyamide-; nonyellowing nonblooming mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics)
- IT Polyimides, uses  
Polysulfones, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(polyether-; nonyellowing nonblooming mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics)
- IT Polyamides, uses  
Polyethers, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(polyimide-; nonyellowing nonblooming mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics)
- IT Polyethers, uses  
RL: POF (Polymer in formulation); USES (Uses)  
(polysulfone-; nonyellowing nonblooming mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics)
- IT Cyclization  
(reductive; of nitroarylazobiaryldiols for prepg.

- benzotriazolyldihydroxybiaryl UV absorbers)
- IT 340006-55-5P  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(in prepn. of benzotriazolyldihydroxybiaryl UV absorbers)
- IT 15989-00-1P 340006-56-6P 340006-59-9P  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(in prepn. of benzotriazolyldihydroxybiaryl UV absorbers)
- IT 88-74-4, 2-Nitroaniline 599-64-4, p-Cumylphenol 2440-22-4, 2-(2H-Benzotriazol-2-yl)-4-methylphenol 3147-75-9 3147-76-0 7440-66-6, Zinc, reactions 7705-08-0, Ferric chloride, reactions 10096-91-0, 2-(2H-Benzotriazol-2-yl)phenol 22385-96-2, 2,2'-Dihydroxy-5,5'-di-tert-butylbiphenyl 340006-54-4  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(in prepn. of benzotriazolyldihydroxybiaryl UV absorbers)
- IT 317384-41-1P 340006-57-7P 340006-58-8P 340006-60-2P 340006-61-3P 340006-77-1P  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(nonyellowing nonbloomng mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics)
- IT 9002-86-2, Polyvinylchloride 9002-88-4, Polyethylene 9003-07-0, Polypropylene 9003-08-1, Melamine/formaldehyde resin 9003-17-2, Polybutadiene 9003-35-4, Phenol/formaldehyde resin 9003-53-6, Polystyrene 9003-54-7, Acrylonitrile-styrene copolymer 9003-56-9, ABS resin 9004-36-8, Cellulose acetate butyrate 9011-05-6, Urea/formaldehyde resin 25014-41-9, Polyacrylonitrile  
RL: POF (Polymer in formulation); USES (Uses)  
(nonyellowing nonbloomng mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics)
- IT 24936-68-3, Lexan 105, properties 25037-45-0 25085-53-4, PROFAX 6301  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(nonyellowing nonbloomng mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics)
- IT 154608-77-2, Joncryl 510  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(nonyellowing nonbloomng mono- and bis- benzotriazolyldihydroxybiaryl UV absorbers for plastics)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 23 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2001:111345 CAPLUS  
DOCUMENT NUMBER: 134:164642  
TITLE: Water-resistant ink-jet printing ink compositions and ink-jet recording device for using them  
INVENTOR(S): Kawaguchi, Takao; Takagi, Hiroaki  
PATENT ASSIGNEE(S): Hitachi, Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001040255	A2	20010213	JP 1999-220225	19990803
PRIORITY APPLN. INFO.:			JP 1999-220225	19990803

OTHER SOURCE(S): MARPAT 134:164642

AB The compns. can be discharged under a pressure as particles via an exciting nozzle to form printing dots which are individually charged and deflected accordingly to their own charges when passing an elec. field prior to their deposition on a printable substrate as prints, where the ink compns. comprise a non-heavy-metal colorant, a binder resin, a solvent and a quaternary phosphonium compd. as a sp. elec. resistance regulator to provide the particles with designed elec. charge while preserving the compatibility with binder resin and improving the ink adhesion. Thus, mixing Bakelite VMCC (a carboxylated vinyl acetate-vinyl chloride copolymer) 5.5, a TiO<sub>2</sub> dispersion (VCC 175-WI) 3.5, di-Bu sebacate 1.0, a tributyl-octylphosphonium bromide 2.0, MEK 80 and MeOH 8 parts gave a title compn. showing good claimed printing properties.

IT 110750-65-7

RL: MOA (Modifier or additive use); USES (Uses)  
(sp. elec. resistance regulator; water-resistant ink-jet printing ink compns. and ink-jet recording device for using them)

RN 110750-65-7 CAPLUS

CN Phosphonium, tributyl(phenylmethyl)-, salt with 1H-benzotriazole (1:1)  
(9CI) (CA INDEX NAME)

CM 1

CRN 47033-82-9

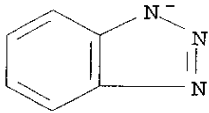
CMF C19 H34 P

(n-Bu)<sub>3</sub><sup>+</sup>P<sup>-</sup>CH<sub>2</sub>-Ph

CM 2

CRN 45665-96-1

CMF C6 H4 N3



IC ICM C09D011-00  
ICS B41J002-01; B41M005-00

CC 42-12 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 74

ST water resistant ink jet printing ink compn;  
piezoelec ink jet recording device pigment ink;  
carboxylated vinyl copolymer binder resin printing ink  
compn; titanium oxide pigment ink jet printing  
ink; tributyl-octylphosphonium bromide elec resistance regulator  
ink compn

IT Polysiloxanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(KP 341, binder resin; water-resistant ink-jet printing  
ink compns. and ink-jet recording device  
for using them)

IT Phenolic resins, uses  
Polyamides, uses  
Polyvinyl butyrals  
RL: TEM (Technical or engineered material use); USES (Uses)  
(binder resin; water-resistant ink-jet printing ink  
compns. and ink-jet recording device for using them)

IT Water-resistant materials  
(jet-printing inks; water-resistant ink-jet  
printing ink compns. and ink-jet  
recording device for using them)

IT Inks  
(jet-printing, water-resistant; water-resistant ink-jet  
printing ink compns. and ink-jet  
recording device for using them)

IT Electric current carriers  
(photocarriers; water-resistant ink-jet printing ink  
compns. and ink-jet recording device for using them)

IT Ink-jet printers  
(piezoelec.; water-resistant ink-jet printing ink  
compns. and ink-jet recording device for using them)

IT Carbon black, uses  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(pigment, Fuji AS Black 810; water-resistant ink-jet printing  
ink compns. and ink-jet recording device  
for using them)

IT Phosphonium compounds  
RL: MOA (Modifier or additive use); USES (Uses)  
(sp. elec. resistance regulator; water-resistant ink-jet



printing ink compns. and ink-jet  
recording device for using them)

IT Binders  
Coloring materials  
(water-resistant ink-jet printing ink  
compns. and ink-jet recording device for using them)

IT 13463-67-7, Titanium oxide, uses  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(VCC 175WI, ink pigment; water-resistant ink-jet  
printing ink compns. and ink-jet  
recording device for using them)

IT 9005-09-8, Bakelite VMCC 9011-13-6, Arastar 700 25085-34-1, Joncryl  
611 26678-93-3, Hitanol 1501 205069-28-9, Toresin F30K 325766-08-3,  
Dianal PB 354  
RL: TEM (Technical or engineered material use); USES (Uses)  
(binder resin; water-resistant ink-jet printing ink  
compns. and ink-jet recording device for using them)

IT 989-38-8, Valifast Red 1308 74566-13-5, Spilon Black BH Special  
325781-98-4, Macrolex Blue 3R  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(pigment; water-resistant ink-jet printing ink  
compns. and ink-jet recording device for using them)

IT 57702-65-5, Tributylloctylphosphonium bromide 110750-65-7  
134950-36-0 325708-28-9 325708-31-4  
RL: MOA (Modifier or additive use); USES (Uses)  
(sp. elec. resistance regulator; water-resistant ink-jet  
printing ink compns. and ink-jet  
recording device for using them)

L45 ANSWER 24 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

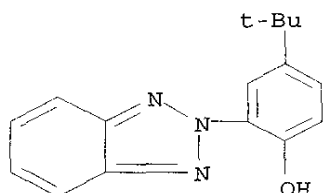
ACCESSION NUMBER: 2001:85543 CAPLUS  
DOCUMENT NUMBER: 134:132571  
TITLE: Flexible laminated sheets with embossed patterns and  
their manufacture  
INVENTOR(S): Fukuoka, Naohiko; Matsumura, Akira  
PATENT ASSIGNEE(S): Chemipro Kasei K. K., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001030392	A2	20010206	JP 1999-203265	19990716
PRIORITY APPLN. INFO.:			JP 1999-203265	19990716

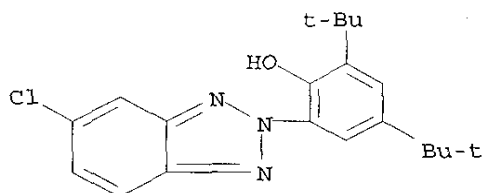
AB The sheets have paper or plastic film substrate layers with embossed  
patterns (according to the difference in curing rate of radiation-curable  
coatings), adhesive layers (imparting peel strength between the substrates

and release paper .gtoreq.100 g/25 m), and release layers (tensile strength .gtoreq.5000 N/cm<sup>2</sup>). Thus, a paper substrate was printed with a 10% Kemisorb 72 (UV absorber)-contg. **ink**, laminated with a silicone-coated release paper via an acrylic adhesive, coated with a UV-curable unsatd. polyester coating, and cured to give a sheet with no wrinkles.

IT 3147-76-0, Kemisorb 79 3864-99-1, Kemisorb 72  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (UV absorber, **ink** contg.; manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)  
 RN 3147-76-0 CAPLUS  
 CN Phenol, 2-(2H-benzotriazol-2-yl)-4-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RN 3864-99-1 CAPLUS  
 CN Phenol, 2-(5-chloro-2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



IC ICM B32B003-30  
 ICS B32B027-00; B32B027-16; B32B029-00; B32B033-00; C09D005-00; C09D201-00  
 CC 38-2 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 42  
 ST radiation curable coating sheet embossed pattern; flexibility laminate sheet printing wrinkle free; acrylic adhesive release paper peel strength; unsatd polyester coating substrate UV absorber  
 IT **Inks**  
 (UV absorber-contg.; manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)  
 IT Acrylic **polymers**, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (adhesive layer; manuf. of flexible laminated sheets with embossed

- patterns by radiation-curable coatings)
- IT Adhesives  
Release coatings  
UV stabilizers  
(manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)
- IT Laminated plastics, uses  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)
- IT Coating materials  
(radiation-curable; manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)
- IT Polysiloxanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(release coating; manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)
- IT Parting materials  
(release paper; manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)
- IT Paper  
(release; manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)
- IT Paper  
Plastic films  
(substrate; manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)
- IT Polyesters, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(substrate; manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)
- IT Polyesters, uses  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(unsatd., radiation-curable coating; manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)
- IT 3147-76-0, Kemisorb 79 3864-99-1, Kemisorb 72  
RL: MOA (Modifier or additive use); USES (Uses)  
(UV absorber, ink contg.; manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)
- IT 25038-59-9, Poly(ethylene terephthalate), uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(substrate; manuf. of flexible laminated sheets with embossed patterns by radiation-curable coatings)

L45 ANSWER 25 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:573898 CAPLUS

DOCUMENT NUMBER: 133:185619

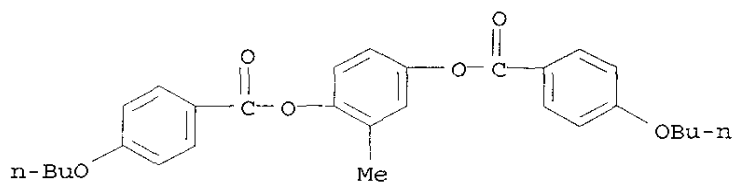
TITLE: Liquid crystalline substance mixtures

INVENTOR(S): Meyer, Frank; Ishida, Hiroki; Schuhmacher, Peter;  
Neumann, Horst

KOROMA EIC1700

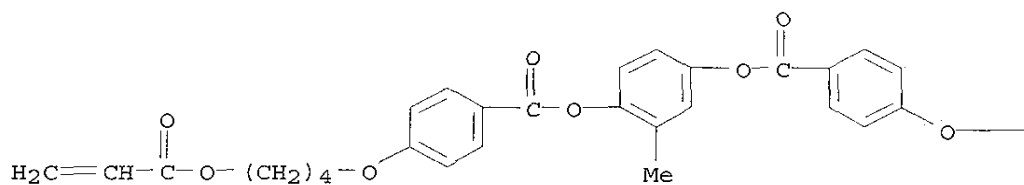
PATENT ASSIGNEE(S): Basf Aktiengesellschaft, Germany  
 SOURCE: PCT Int. Appl., 67 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000047694	A1	20000817	WO 2000-EP915	20000205
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
DE 19905394	A1	20000817	DE 1999-19905394	19990210
CA 2359729	AA	20000817	CA 2000-2359729	20000205
BR 2000008117	A	20011113	BR 2000-8117	20000205
EP 1155098	A1	20011121	EP 2000-905026	20000205
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002536529	T2	20021029	JP 2000-598595	20000205
PRIORITY APPLN. INFO.:			DE 1999-19905394 A	19990210
			WO 2000-EP915 W	20000205
OTHER SOURCE(S):		MARPAT 133:185619		
AB	The invention relates to liq. cryst. substance mixts. which contain at least 1 compd. selected from the group consisting of the compds. of the formula Z1-Y1-A1-Y3-M1-Y4-A2-Y2-Z2 and of the formula Z3-Y5-A3-Y7-M2-P (P = H, C1-C15-alkyl, -Y8-A4-Y6-Z4 group; Z1-4 = <b>polymerizable</b> group; Y1-8 = linking group; A1-4 = spacer; M1, M2 = mesogenic group). Said liq. cryst. mixts. of substances optionally contain further additives selected from photoinitiators, reactive diluents and diluents, auxiliaries, <b>colorants</b> and stabilizers. The invention also relates to the use of such liq. cryst. mixts. of substances as printing <b>ink</b> , for printing or coating substrates, in electrooptic components, for forgery-proof marking of objects and for producing films or coatings.			
IT	66786-95-6 132900-75-5 187585-64-4 187585-78-0 187586-33-0 RL: TEM (Technical or engineered material use); USES (Uses) (in liq. cryst. substance mixts. for printing inks)			
RN	66786-95-6 CAPLUS			
CN	Benzoic acid, 4-butoxy-, 2-methyl-1,4-phenylene ester (9CI) (CA INDEX NAME)			

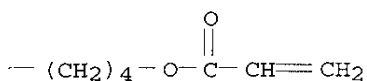


RN 132900-75-5 CAPLUS  
 CN Benzoic acid, 4-[4-[(1-oxo-2-propenyl)oxy]butoxy]-, 2-methyl-1,4-phenylene ester (9CI) (CA INDEX NAME)

PAGE 1-A

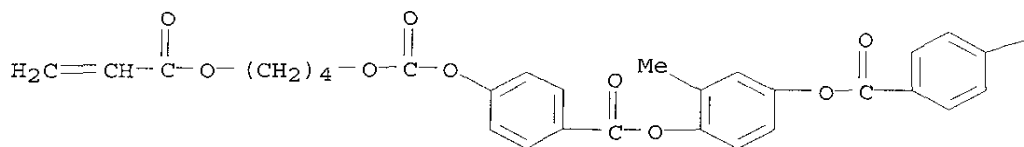


PAGE 1-B

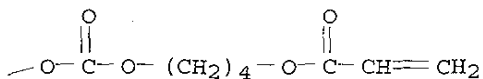


RN 187585-64-4 CAPLUS  
 CN Benzoic acid, 4-[[[4-[(1-oxo-2-propenyl)oxy]butoxy]carbonyl]oxy]-, 2-methyl-1,4-phenylene ester (9CI) (CA INDEX NAME)

PAGE 1-A



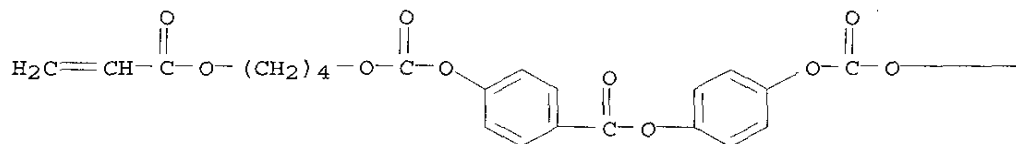
PAGE 1-B



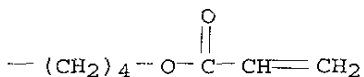
RN 187585-78-0 CAPLUS

CN Benzoic acid, 4-[[[4-[(1-oxo-2-propenyl)oxy]butoxy]carbonyl]oxy]-, 4-[[[4-[(1-oxo-2-propenyl)oxy]butoxy]carbonyl]oxy]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

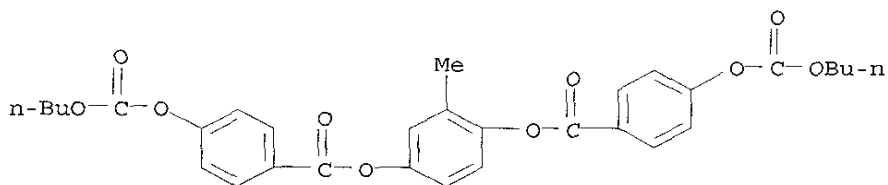


PAGE 1-B



RN 187586-33-0 CAPLUS

CN Benzoic acid, 4-[(butoxycarbonyl)oxy]-, 2-methyl-1,4-phenylene ester (9CI) (CA INDEX NAME)



IC ICM C09K019-54

ICS C09K019-00; C09K019-20; C09K019-38; C09D005-36

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 43, 73, 75

ST liq cryst substance mixt polymeric liq crystal

IT Liquid crystals

Liquid crystals

(films; polymeric liq. cryst. substance mixts. for)

IT Aromatic hydrocarbons, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (in liq. cryst. substance mixts. for printing inks)

IT Films  
 Films  
 (liq.-crystal; polymeric liq. cryst. substance mixts. for)

IT Inks  
 (marking; polymeric liq. cryst. substance mixts. for)

IT Liquid crystals, polymeric  
 (polymeric liq. cryst. substance mixts.)

IT Optical filters  
 Optical imaging devices  
 Polarizers  
 (polymeric liq. cryst. substance mixts. for)

IT Inks  
 (printing; polymeric liq. cryst. substance mixts. for)

IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (quartz-filled, TEGO Airex 900; in liq. cryst. substance mixts. for  
 printing inks)

IT Information systems  
 (security documents; polymeric liq. cryst. substance mixts.  
 for)

IT 947-19-3, Irgacure 184 1330-20-7, Xylene, uses 7328-17-8 13048-33-4  
 66786-95-6 71868-10-5, Irgacure 907 119313-12-1, Irgacure 369  
 132900-75-5 134633-08-2, BYK 361 187585-64-4  
 187585-78-0 187586-33-0 214975-65-2, BYK 57  
 223572-88-1  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (in liq. cryst. substance mixts. for printing inks)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 26 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 2000:323221 CAPLUS  
 DOCUMENT NUMBER: 132:335939  
 TITLE: Stir-in pigment compositions for coloring  
 high-molecular weight materials  
 INVENTOR(S): Babler, Fridolin  
 PATENT ASSIGNEE(S): Ciba Specialty Chemicals Corp., USA  
 SOURCE: U.S., 8 pp., Cont.-in-part of U.S. Ser. No. 148,937,  
 abandoned.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6063182	A	20000516	US 1998-213009	19981216
PRIORITY APPLN. INFO.:			US 1997-58154P	P 19970908

US 1997-59768P P 19970923

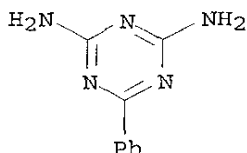
US 1998-148937 B2 19980904

AB A dispersible pigment compn. in the form of microgranules for coatings and ink systems comprises 85-99.5 parts pigment and 0.5-15 parts additive comprising a vinylpyrrolidone **polymer** or **copolymer**. Thus, a pigment compn. was prepd. by treating an aq. Luviskol VA 73W 600, Witconol 2720 (poly(ethyleneoxy)sorbitan laurate) 173.7, and Ultra Talc 609 1550 g with an aq. press cake contg. 7.7 g 3,6-di(4-chlorophenyl)-1,4-diketopyrrolopyrrole (Irgazin DPP red BO), stirring with a Cowels dissolver and spray drying at air temp. .gtoreq.400.degree..

IT 91-76-9, Benzoguanamine  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)

RN 91-76-9 CAPLUS

CN 1,3,5-Triazine-2,4-diamine, 6-phenyl- (9CI) (CA INDEX NAME)



IC ICM C09C003-08  
 ICS C09B067-02; C09B067-00

NCL 106506000

CC 42-12 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 40, 41

ST pigment vinylpyrrolidone **polymer** additive compn; Luviskol Witconol Ultra Talc Irgazin pigment; dispersion pigment coating **ink**; coating **ink** vinylpyrrolidone **polymer** pigment **compn**

IT Polyelectrolytes  
 (anionic; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)

IT Polyelectrolytes  
 (cationic; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)

IT Automobiles  
 (coatings; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)

IT Coating materials  
 (crosslinkable; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)

IT Synthetic rubber, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (diene; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)

KOROMA EIC1700



- IT Polyoxyalkylenes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(fatty amido group-terminated; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)
- IT Amides, uses  
Amides, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(fatty, alkoxylated; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)
- IT Amines, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(fatty, ethoxylated or propoxylated; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)
- IT Quaternary ammonium compounds, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(fatty; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)
- IT Amides, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polycycloamides; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)
- IT Polyketones  
Polyketones  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polyether-; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)
- IT Imines  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polyimines; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)
- IT Polyethers, uses  
Polyethers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polyketone-; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)
- IT Vinyl compounds, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(**polymers**; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)
- IT Drying  
(spray; stir-in aq. pigment dispersion contg. vinylpyrrolidone **polymers** for inks and coatings)
- IT Anthraquinone dyes  
Azo dyes  
Cyanine dyes  
Disperse systems  
Fillers  
Inks  
Microparticles  
Paints  
Pigments, nonbiological

(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Carbon black, uses  
Kaolin, uses  
Mica-group minerals, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Acrylic polymers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Alkyd resins  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Aminoplasts  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Epoxy resins, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Fluoropolymers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Oxides (inorganic), uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Phenolic resins, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Plastics, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Polyamides, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Polyethers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT Polyimides, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

- IT Polyoxyalkylenes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)
- IT Polysiloxanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)
- IT Polysulfones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)
- IT Polyurethanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)
- IT Rubber, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)
- IT Schiff bases  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)
- IT Sulfides, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)
- IT Synthetic polymeric fibers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)
- IT Crosslinking  
(thermal, coatings; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone polymers for inks and coatings)
- IT Polymers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(water-sol., neutral, anionic or cationic; stir-in aq. pigment  
dispersion contg. vinylpyrrolidone polymers for inks  
and coatings)
- IT 8012-00-8, Antimony yellow  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Antimony yellow; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone polymers for inks and coatings)
- IT 84632-65-5  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I Pigment Red 254; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone polymers for inks and coatings)
- IT 147-14-8, C.I. Pigment Blue 15  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Blue 15; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone polymers for inks and coatings)

IT 81-77-6, C.I. Pigment Blue 60  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Blue 60; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 35869-64-8, C.I. Pigment Brown 23  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Brown 23; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 14302-13-7, C.I. Pigment Green 36  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Green 36; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 1328-53-6, C.I. Pigment Green 7  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Green 7; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 40716-47-0, C.I. Pigment Orange 61  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Orange 61; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 980-26-7, C.I. Pigment Red 122  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Red 122; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 5280-78-4, C.I. Pigment Red 144  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Red 144; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 2786-76-7, C.I. Pigment Red 170  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Red 170; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 4051-63-2, C.I. Pigment Red 177  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Red 177; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 5521-31-3, C.I. Pigment Red 179  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Red 179; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 54660-00-3  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Red 255; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 88949-33-1  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Red 264; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 17741-63-8, C.I. Pigment Violet 37  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Violet 37; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for inks and coatings)

IT 5045-40-9, C.I. Pigment Yellow 109  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Yellow 109; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for **inks** and coatings)

IT 5590-18-1, C.I. Pigment Yellow 110  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Yellow 110; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for **inks** and coatings)

IT 5102-83-0, C.I. Pigment Yellow 13  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Yellow 13; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for **inks** and coatings)

IT 4118-16-5, C.I. Pigment Yellow 147  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Yellow 147; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for **inks** and coatings)

IT 6358-31-2, C.I. Pigment Yellow 74  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Yellow 74; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for **inks** and coatings)

IT 5567-15-7, C.I. Pigment Yellow 83  
RL: TEM (Technical or engineered material use); USES (Uses)  
(C.I. Pigment Yellow 83; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for **inks** and coatings)

IT 215247-95-3, Cromophtal Violet GT  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Cromophtal Violet GT; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for **inks** and coatings)

IT 9016-45-9, Igepal CO-530  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Igepal CO-530; stir-in aq. pigment dispersion contg. vinylpyrrolidone  
**polymers** for **inks** and coatings)

IT 9003-39-8, Luviskol K30  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Luviskol K30; stir-in aq. pigment dispersion contg. vinylpyrrolidone  
**polymers** for **inks** and coatings)

IT 3089-17-6, Monastral Magenta B  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Monastral Magenta B; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for **inks** and coatings)

IT 1047-16-1  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Monastral Red Y RT-759-D; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone **polymers** for **inks** and coatings)

IT 14807-96-6, ULTRA Talc 609, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(ULTRA Talc 609; stir-in aq. pigment dispersion contg. vinylpyrrolidone  
**polymers** for **inks** and coatings)

IT 9005-64-5, Witconol 2720  
RL: TEM (Technical or engineered material use); USES (Uses)  
(Witconol 2720; stir-in aq. pigment dispersion contg. vinylpyrrolidone  
**polymers** for **inks** and coatings)

IT 9002-88-4, Polyethylene  
RL: TEM (Technical or engineered material use); USES (Uses)  
(high-d.; stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT 7631-86-9, Silica, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(natural or synthetic; stir-in aq. pigment dispersion contg.  
vinylpyrrolidone polymers for inks and coatings)

IT 95-14-7, 1H-Benzotriazole  
RL: MOA (Modifier or additive use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT 25086-89-9, Luviskol VA 73W  
RL: POF (Polymer in formulation); TEM (Technical or engineered material  
use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

IT 91-76-9, Benzoguanamine 1308-38-9, Chromium oxide (Cr2O3), uses  
1345-16-0, Cobalt blue 7758-97-6, Lead chromate 8011-87-8, Cobalt  
green 8046-59-1, Manganese blue 9002-84-0, Polytetrafluoroethylene  
9002-89-5, Polyvinylalcohol 9003-01-4, Polyacrylic acid 9003-08-1,  
Formaldehyde-melamine copolymer 9003-19-4, Polyvinylether  
9003-35-4, Formaldehyde-phenol copolymer 9003-53-6,  
Polystyrene 9004-81-3, Polyethylene glycol laurate 9004-96-0,  
Polyethylene glycol oleate 9011-05-6, Formaldehyde-urea  
copolymer 9062-90-2, Polyethylene glycol sorbitan oleate  
10190-55-3, Lead molybdate 11129-48-9, Iron zinc oxide 12626-36-7,  
Cadmium selenide sulfide (Cd(Se,S)) 12679-46-8, Carbazole dioxazine  
13983-17-0, Wollastonite 24937-72-2, Polymaleic anhydride 24980-16-3,  
Acrylic acid-acrylonitrile-styrene copolymer 25087-26-7,  
Polymethacrylic acid 25322-68-3, Polyethyleneoxide 53529-09-2, Lead  
chromate sulfate 53801-77-7, Bismuth vanadate 57455-37-5, Ultramarine  
blue 71819-74-4, C.I. Pigment Orange 48 71819-75-5, C.I. Pigment  
Orange 49 84632-50-8 84632-59-7 154946-66-4  
RL: TEM (Technical or engineered material use); USES (Uses)  
(stir-in aq. pigment dispersion contg. vinylpyrrolidone  
polymers for inks and coatings)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 27 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 2000:247443 CAPLUS  
DOCUMENT NUMBER: 132:266604  
TITLE: Dyed UV-absorbing polymer  
particles and light-resistant water-based  
inks containing them  
INVENTOR(S): Shida, Hiroki; Ito, Nobuyuki  
PATENT ASSIGNEE(S): Jsr Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000109564	A2	20000418	JP 1998-286987	19981008
PRIORITY APPLN. INFO.:			JP 1998-286987	19981008

AB Water-based inks contain the dyed polymer particles having UV-absorbing functional groups. Thus, 100 parts emulsion-polymd. 5:3:2:1:30:30:29:3:0.5 2-(2'-hydroxy-5'-methacryloyloxyethylphenyl)-2H-benzotriazole-methacrylic acid-N-methylolacrylamide-diacetone acrylamide-Bu acrylate-Me methacrylate-styrene-Latemul S 180A (reactive emulsifier)-adipic acid dihydrazide copolymer particles (size 0.06 .mu.m) were dyed with 4 parts C.I. Solvent Yellow 40. A water-based ink contg. the dyed particles 15, iso-Pr alc. 5, and H2O 80 parts showed good storage stability at 50.degree. for 1 mo and UV resistance at black panel temp. 63.degree. and relative humidity 70% for >20 h.

IT 263244-67-3P 263244-68-4P 263244-69-5P  
263244-70-8P 263244-71-9P 263244-72-0P  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(light-resistant water-based inks contg. dyed UV-absorbing polymer particles)

RN 263244-67-3 CAPLUS

CN Hexanedioic acid, dihydrazide, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, N-(hydroxymethyl)-2-propenamide, Latemul S 180A, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 113255-53-1

CMF Unspecified

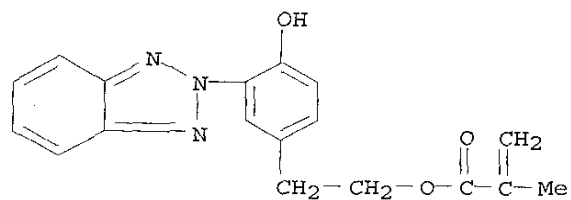
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\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

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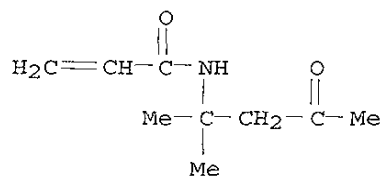
CMF C18 H17 N3 O3



CM 3

CRN 2873-97-4

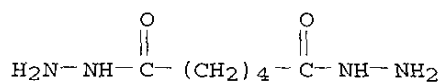
CMF C9 H15 N O2



CM 4

CRN 1071-93-8

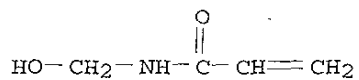
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CM 5

CRN 924-42-5

CMF C4 H7 N O2

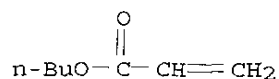


CM 6

KOROMA EIC1700

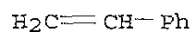


CRN 141-32-2  
CMF C7 H12 O2



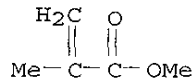
CM 7

CRN 100-42-5  
CMF C8 H8



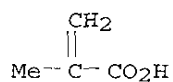
CM 8

CRN 80-62-6  
CMF C5 H8 O2



CM 9

CRN 79-41-4  
CMF C4 H6 O2



RN 263244-68-4 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), ethyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate, Latemul S 180A and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

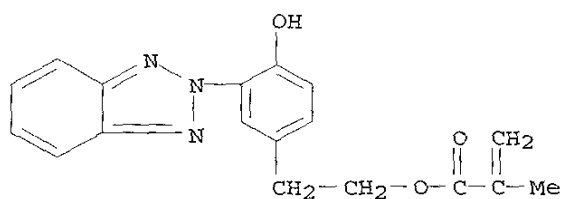
Page 105Shosho741

CRN 113255-53-1  
CMF Unspecified  
CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

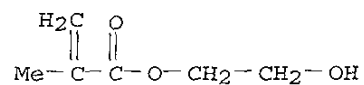
CM 2

CRN 96478-09-0  
CMF C18 H17 N3 O3



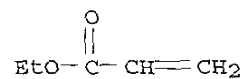
CM 3

CRN 868-77-9  
CMF C6 H10 O3



CM 4

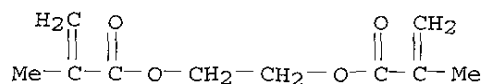
CRN 140-88-5  
CMF C5 H8 O2



CM 5

CRN 97-90-5  
CMF C10 H14 O4

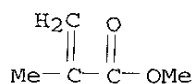
KOROMA EIC1700



CM 6

CRN 80-62-6

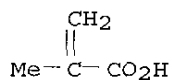
CMF C5 H8 O2



CM 7

CRN 79-41-4

CMF C4 H6 O2



RN 263244-69-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, 1,1-difluoroethene, 1,2-ethanediyl bis(2-methyl-2-propenoate), 2-ethylhexyl 2-propenoate, ethyl 2-propenoate, 1,1,2,3,3,3-hexafluoro-1-propene, 2-hydroxyethyl 2-methyl-2-propenoate, Latemul S 180A, methyl 2-methyl-2-propenoate, 1,2,2,6,6-pentamethyl-4-piperidiny 2-propenoate and tetrafluoroethene (9CI) (CA INDEX NAME)

CM 1

CRN 113255-53-1

CMF Unspecified

CCI MAN

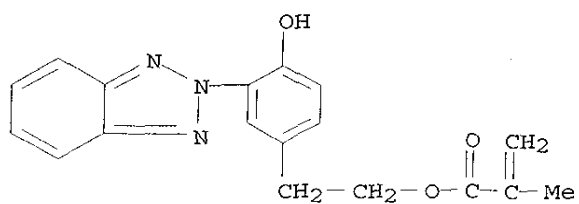
\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 96478-09-0

CMF C18 H17 N3 O3

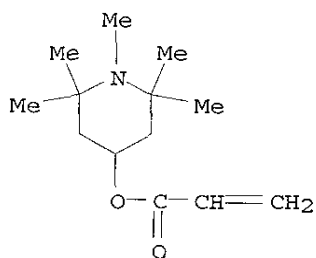
KOROMA BIC1700



CM 3

CRN 43224-02-8

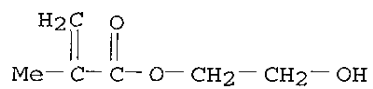
CMF C13 H23 N O2



CM 4

CRN 868-77-9

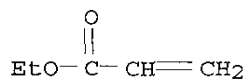
CMF C6 H10 O3



CM 5

CRN 140-88-5

CMF C5 H8 O2



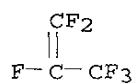
KOROMA EIC1700

Page 108Shosho741

CM 6

CRN 116-15-4

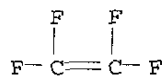
CMF C3 F6



CM 7

CRN 116-14-3

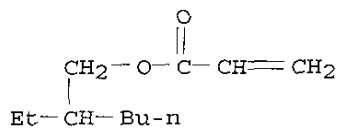
CMF C2 F4



CM 8

CRN 103-11-7

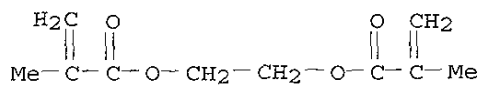
CMF C11 H20 O2



CM 9

CRN 97-90-5

CMF C10 H14 O4

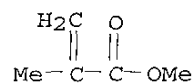


CM 10

KOROMA EIC1700

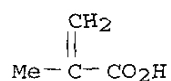
Page 109Shosho741

CRN 80-62-6  
CMF C5 H8 O2



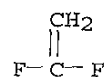
CM 11

CRN 79-41-4  
CMF C4 H6 O2



CM 12

CRN 75-38-7  
CMF C2 H2 F2

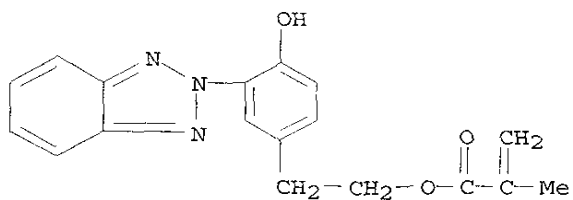


RN 263244-70-8 CAPLUS  
CN 2-Propenoic acid, 2-methyl-, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, butyl 2-propenoate, 1,2-ethanediyl bis(2-methyl-2-propenoate), ethenylbenzene, 2-ethylhexyl 2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate and N-(hydroxymethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 96478-09-0  
CMF C18 H17 N3 O3

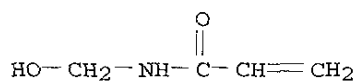
KOROMA EIC1700



CM 2

CRN 924-42-5

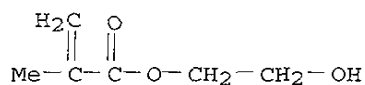
CMF C4 H7 N O2



CM 3

CRN 868-77-9

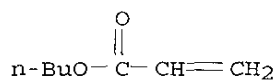
CMF C6 H10 O3



CM 4

CRN 141-32-2

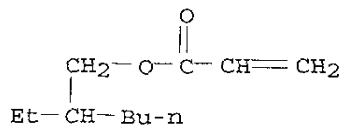
CMF C7 H12 O2



CM 5

CRN 103-11-7

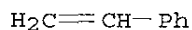
CMF C11 H20 O2



CM 6

CRN 100-42-5

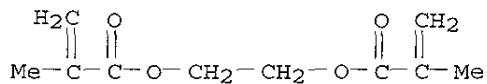
CMF C8 H8



CM 7

CRN 97-90-5

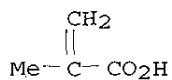
CMF C10 H14 O4



CM 8

CRN 79-41-4

CMF C4 H6 O2



RN 263244-71-9 CAPLUS

CN Hexanedioic acid, dihydrazide, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, butyl 2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamide, ethenylbenzene, 2-ethylhexyl 2-propenoate, N-(hydroxymethyl)-2-propenamide, Latemul S 180A, 2-methyl-2-propenoic acid and 1,2,2,6,6-pentamethyl-4-piperidinyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

KOROMA EIC1700



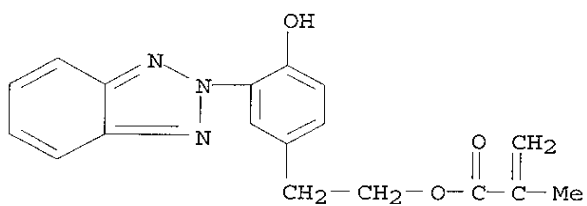
Page 112Shosho741

CRN 113255-53-1  
CMF Unspecified  
CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

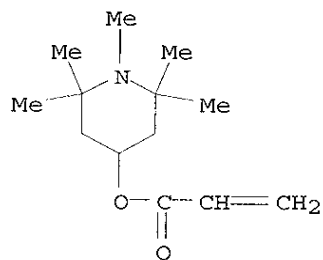
CM 2

CRN 96478-09-0  
CMF C18 H17 N3 O3



CM 3

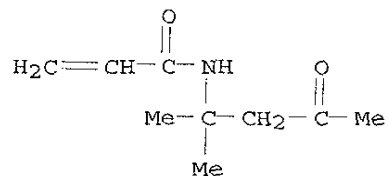
CRN 43224-02-8  
CMF C13 H23 N O2



CM 4

CRN 2873-97-4  
CMF C9 H15 N O2

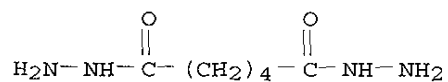
KOROMA EIC1700



CM 5

CRN 1071-93-8

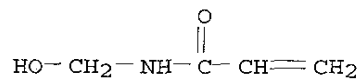
CMF C6 H14 N4 O2



CM 6

CRN 924-42-5

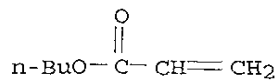
CMF C4 H7 N O2



CM 7

CRN 141-32-2

CMF C7 H12 O2

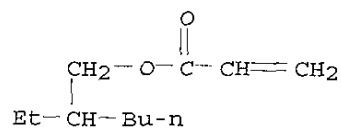


CM 8

CRN 103-11-7

CMF C11 H20 O2

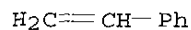
KOROMA EIC1700



CM 9

CRN 100-42-5

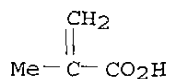
CMF C8 H8



CM 10

CRN 79-41-4

CMF C4 H6 O2



RN 263244-72-0 CAPLUS

CN Hexanedioic acid, dihydrazide, polymer with 2-[3-(2H-benzotriazol-2-yl)-4-hydroxyphenyl]ethyl 2-methyl-2-propenoate, N-(1,1-dimethyl-3-oxobutyl)-2-propenamamide, ethenylbenzene, ethyl 2-propenoate, Latemul S 180A, methyl 2-methyl-2-propenoate and 2-methyl-2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 113255-53-1

CMF Unspecified

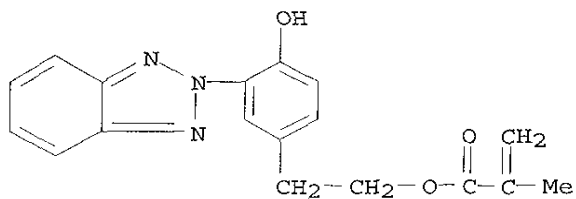
CCI MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 2

CRN 96478-09-0

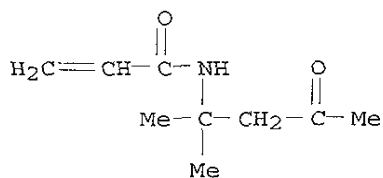
CMF C18 H17 N3 O3



CM 3

CRN 2873-97-4

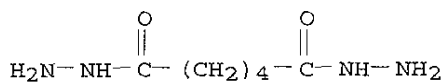
CMF C9 H15 N O2



CM 4

CRN 1071-93-8

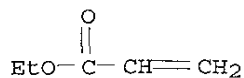
CMF C6 H14 N4 O2



CM 5

CRN 140-88-5

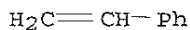
CMF C5 H8 O2



CM 6

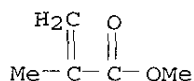
KOROMA EIC1700

CRN 100-42-5  
CMF C8 H8



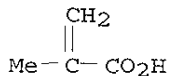
CM 7

CRN 80-62-6  
CMF C5 H8 O2



CM 8

CRN 79-41-4  
CMF C4 H6 O2



- IC ICM C08J003-12  
ICS C08J003-20; C08L027-12; C08L033-08; C08L051-00; C08L083-04;  
C09B067-02; C09D011-00
- CC 42-12 (Coatings, Inks, and Related Products)
- ST UV absorbing **polymer** particle water **ink**; **light**  
resistance water **ink** methacryloyloxyethylphenylbenzotriazole  
**polymer**
- IT **Fluoropolymers**, uses  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or  
engineered material use); PREP (Preparation); USES (Uses)  
(acrylic; **light**-resistant water-based **inks** contg.  
**dyed** UV-absorbing **polymer** particles)
- IT **Light**-resistant materials  
**Light**-resistant materials  
(**inks**; **light**-resistant water-based **inks**  
contg. **dyed** UV-absorbing **polymer** particles)
- IT **Dyes**  
UV stabilizers  
(**light**-resistant water-based **inks** contg.  
**dyed** UV-absorbing **polymer** particles)
- IT **Polysiloxanes**, uses

Silsesquioxanes

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(light-resistant water-based inks contg.

dyed UV-absorbing polymer particles)

IT Inks

Inks

(light-resistant; light-resistant water-based

inks contg. dyed UV-absorbing polymer

particles)

IT Inks

(printing, water-thinned; light-resistant water-based

inks contg. dyed UV-absorbing polymer

particles)

IT 25930-91-0P, Methyltriethoxysilane homopolymer 153315-80-1P,

Methyltriethoxysilane homopolymer, ladder stru

263244-67-3P 263244-68-4P 263244-69-5P

263244-70-8P 263244-71-9P 263244-72-0P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(light-resistant water-based inks contg.

dyed UV-absorbing polymer particles)

IT 12221-86-2, C.I. Basic Yellow 40 61813-78-3, C.I. Solvent Yellow 40

RL: TEM (Technical or engineered material use); USES (Uses)

(light-resistant water-based inks contg.

dyed UV-absorbing polymer particles)

L45 ANSWER 28 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:232541 CAPLUS

DOCUMENT NUMBER: 132:266120

TITLE: Weather- and scratch-resistant decorative polyolefin-type sheets for construction materials

INVENTOR(S): Endo, Keisuke

PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

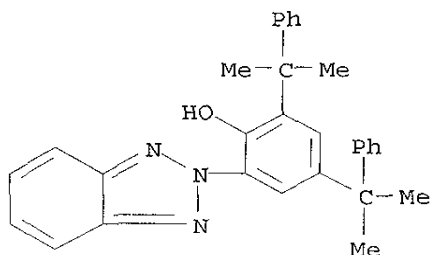
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000103019	A2	20000411	JP 1998-272944	19980928
PRIORITY APPLN. INFO.:			JP 1998-272944	19980928
AB The decorative sheets comprise (A) substrate sheets having primer layers and (B) surface protection layers of cured products of ionized radiation-curable resins on the surfaces, wherein A comprise polyolefin-type thermoplastic resins contg. UV absorbers bearing OH and B comprise resins bearing NCO. The back sides of the substrate sheets may have primer layers and printing layers. Bleed-out of UV absorbers which causes delamination can be avoided. Thus, a thermoplastic elastomer sheet				

comprising isotactic polypropylene 75, hydrogenated styrene-butadiene rubber 25, and 2-(2'-hydroxy-3',5'-bis-.alpha.,.alpha.-dimethylbenzylphenyl)benzotriazole 0.8 part was corona-treated on both sides, coated with a primer contg. a 100:10 acrylic polyol-HDI mixt. Then the backside of the sheet was printed with a pigmented gravure ink (7:3 acrylic resin-urethane resin mixed binder) to form a graining. The surface was coated with a curable compn. contg. a bifunctional bisphenol A-type epoxy acrylate prepolymer 20, a bifunctional phenol-type epoxy acrylate 20, trimethylolpropane triacrylate 20, an urethane acrylate (polytetramethylene glycol 1000, IPDI 444, 2-hydroxyethyl acrylate 232 parts) 20, and a silicone acrylate 0.8 part, and exposed to electron beam to give a decorative sheet having excellent layer adhesion and no discoloration after 48 h of UV irradiation.

IT 70321-86-7, 2-(2'-Hydroxy-3',5'-bis-.alpha.,.alpha.-dimethylbenzylphenyl)benzotriazole  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (substrates contg.; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)  
 RN 70321-86-7 CAPLUS  
 CN Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)- (9CI)  
 (CA INDEX NAME)



IC ICM B32B027-32  
 ICS B32B027-18  
 CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 39  
 ST UV resistance decorative sheet construction; ionized radiation curable resin decorative sheet; electron beam curable resin decorative sheet; polyolefin substrate UV absorber decorative sheet; hydroxy contg UV absorber decorative sheet; acrylic polyurethane primer polyolefin decorative sheet; benzotriazole hydroxy UV absorber decorative sheet; thermoplastic elastomer polypropylene hydrogenated butadiene styrene rubber decorative sheet  
 IT Coating materials  
 (UV-curable, protection layers; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)  
 IT Polyurethanes, uses  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (acrylic polymer blend, gravure ink binders; UV-

- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Polysiloxanes, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(acrylic, electron beam-curable compns. contg., for protection layers; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Coating materials  
(electron-beam-curable, protection layers; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Styrene-butadiene rubber, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(hydrogenated, substrate, isotactic polypropylene blend, thermoplastic elastomers, contg. UV absorbers bearing OH; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Acrylic polymers, uses  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyols, reaction products with HDI, primers; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Thermoplastic rubber  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(polypropylene-hydrogenated butadiene-styrene rubber blend, substrate, contg. UV absorbers bearing OH; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Acrylic polymers, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(polysiloxane-, electron beam-curable compns. contg., for protection layers; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Acrylic polymers, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(polyurethane blend, gravure ink binders; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT 80-05-7D, Bisphenol A, epoxy acrylate prepolymers 108-95-2D, Phenol, epoxy acrylates, uses 15625-89-5, Trimethylolpropane triacrylate 83104-79-4, 2-Hydroxyethyl acrylate-isophorone diisocyanate-polytetramethylene glycol copolymer  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(electron beam-curable compns. contg., for protection layers; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)



- IT 1344-28-1, Alumina, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (fillers, electron beam-curable compns. contg., for  
 protection layers; UV- and scratch-resistant decorative polyolefin-type  
 sheets for construction materials)
- IT 822-06-0DP, HDI, reaction products with acrylic polyols  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP  
 (Properties); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (primers; UV- and scratch-resistant decorative polyolefin-type sheets  
 for construction materials)
- IT 9003-55-8  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or  
 engineered material use); USES (Uses)  
 (styrene-butadiene rubber, hydrogenated, substrate, isotactic  
 polypropylene blend, thermoplastic elastomers, contg. UV absorbers  
 bearing OH; UV- and scratch-resistant decorative polyolefin-type sheets  
 for construction materials)
- IT 25085-53-4, Isotactic polypropylene  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or  
 engineered material use); USES (Uses)  
 (substrate, hydrogenated styrene-butadiene rubber blend, thermoplastic  
 elastomers, contg. UV absorbers bearing OH; UV- and scratch-resistant  
 decorative polyolefin-type sheets for construction materials)
- IT 70321-86-7, 2-(2'-Hydroxy-3',5'-bis-.alpha.,.alpha.-  
 dimethylbenzylphenyl)benzotriazole  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (substrates contg.; UV- and scratch-resistant decorative  
 polyolefin-type sheets for construction materials)

L45 ANSWER 29 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:232540 CAPLUS  
 DOCUMENT NUMBER: 132:266119  
 TITLE: Weather- and scratch-resistant decorative  
 polyolefin-type sheets for construction materials  
 INVENTOR(S): Endo, Keisuke  
 PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000103018	A2	20000411	JP 1998-272885	19980928
PRIORITY APPLN. INFO.:			JP 1998-272885	19980928

AB The decorative sheets comprise (A) substrate sheets having primer layers  
 and (B) surface protection layers of cured products of ionized  
 radiation-curable resins on the surfaces, wherein A comprise  
 polyolefin-type thermoplastic resins contg. UV absorbers bearing OH and B

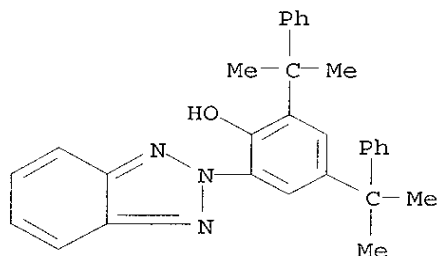
comprise blends of 2-component-type urethane resins and butyral resins. The back sides of the substrate sheets may have primer layers and printing layers. Bleed-out of UV absorbers which causes delamination can be avoided. Thus, a thermoplastic elastomer sheet comprising isotactic polypropylene 75, hydrogenated styrene-butadiene rubber 25, and 2-(2'-hydroxy-3',5'-bis-.alpha.,.alpha.-dimethylbenzylphenyl)benzotriazole 0.8 part was corona-treated on both sides, coated with a primer contg. a 1:1 blend of a butyral resin and a 100:10 acrylic polyol-HDI mixt. Then the backside of the sheet was printed with a pigmented gravure ink (7:3 acrylic resin-urethane resin mixed binder) to form a graining. The surface was coated with a curable compn. contg. a bifunctional bisphenol A-type epoxy acrylate prepolymer 20, a bifunctional phenol-type epoxy acrylate 20, trimethylolpropane triacrylate 20, an urethane acrylate (polytetramethylene glycol 1000, IPDI 444, 2-hydroxyethyl acrylate 232 parts) 20, and a silicone acrylate 0.8 part, and exposed to electron beam to give a decorative sheet having excellent layer adhesion and no discoloration after 48 h of UV irradiation.

IT 70321-86-7, 2-(2'-Hydroxy-3',5'-bis-.alpha.,.alpha.-dimethylbenzylphenyl)benzotriazole

RL: MOA (Modifier or additive use); USES (Uses)  
(substrates contg.; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)

RN 70321-86-7 CAPLUS

CN Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)- (9CI)  
(CA INDEX NAME)



IC ICM B32B027-32

ICS B32B027-18

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 39

ST UV resistance decorative sheet construction; ionized radiation curable resin decorative sheet; electron beam curable resin decorative sheet; polyolefin substrate UV absorber decorative sheet; hydroxy contg UV absorber decorative sheet; acrylic polyurethane butyral primer decorative sheet; benzotriazole hydroxy UV absorber decorative sheet; thermoplastic elastomer polypropylene hydrogenated butadiene styrene rubber decorative sheet

IT Polyurethanes, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

- (acrylic **polymer** blend, gravure ink binders; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Polyvinyl butyrals  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(acrylic polyol-HDI mixt. blend, primers; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Polysiloxanes, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(acrylic, electron beam-curable compns. contg., for protection layers; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Styrene-butadiene rubber, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(hydrogenated, substrate, isotactic polypropylene blend, thermoplastic elastomers, contg. UV absorbers bearing OH; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Acrylic polymers, uses  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyols, reaction products with HDI, butyral resin blend, primers; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Thermoplastic rubber  
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(polypropylene-hydrogenated butadiene-styrene rubber blend, substrate, contg. UV absorbers bearing OH; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Acrylic polymers, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(polysiloxane-, electron beam-curable compns. contg., for protection layers; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT Acrylic polymers, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(polyurethane blend, gravure ink binders; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT 822-06-0DP, HDI, reaction products with acrylic polyols  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(butyral resin blend, primers; UV- and scratch-resistant decorative polyolefin-type sheets for construction materials)
- IT 80-05-7D, Bisphenol A, epoxy acrylate **prepolymers** 108-95-2D,

Phenol, epoxy acrylates, uses 15625-89-5, Trimethylolpropane triacrylate  
83104-79-4, 2-Hydroxyethyl acrylate-isophorone diisocyanate-  
polytetramethylene glycol copolymer

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or  
engineered material use); USES (Uses)

(electron beam-curable compns. contg., for protection layers;  
UV- and scratch-resistant decorative polyolefin-type sheets for  
construction materials)

IT 1344-28-1, Alumina, uses

RL: MOA (Modifier or additive use); USES (Uses)

(fillers, electron beam-curable compns. contg., for  
protection layers; UV- and scratch-resistant decorative polyolefin-type  
sheets for construction materials)

IT 9003-55-8

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or  
engineered material use); USES (Uses)

(styrene-butadiene rubber, hydrogenated, substrate, isotactic  
polypropylene blend, thermoplastic elastomers, contg. UV absorbers  
bearing OH; UV- and scratch-resistant decorative polyolefin-type sheets  
for construction materials)

IT 25085-53-4, Isotactic polypropylene

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or  
engineered material use); USES (Uses)

(substrate, hydrogenated styrene-butadiene rubber blend, thermoplastic  
elastomers, contg. UV absorbers bearing OH; UV- and scratch-resistant  
decorative polyolefin-type sheets for construction materials)

IT 70321-86-7, 2-(2'-Hydroxy-3',5'-bis-.alpha.,.alpha.-  
dimethylbenzylphenyl)benzotriazole

RL: MOA (Modifier or additive use); USES (Uses)

(substrates contg.; UV- and scratch-resistant decorative  
polyolefin-type sheets for construction materials)

L45 ANSWER 30 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:79175 CAPLUS

DOCUMENT NUMBER: 132:124273

TITLE: Water-washable antisoiling coatings containing  
multibranched polymers

INVENTOR(S): Kojima, Shiro

PATENT ASSIGNEE(S): Toa Gosei Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000034440	A2	20000202	JP 1998-216415	19980715
PRIORITY APPLN. INFO.:			JP 1998-216415	19980715
AB The coatings contain (A) multibranched polymers comprising OH-contg. vinyl polymer main chains and polyalkylene glycol- and				

polysiloxane-contg. polymer side chains and (B) OH-reactive hardeners. Thus, methoxypolyethylene glycol monomethacrylate and X 22-174DX (methacryloyl-terminated di-Me polysiloxane) were polymd. in the presence of 3-mercaptopropionic acid and esterified with glycidyl methacrylate to give a methacryloyl-terminated macromonomer, 10.0 g of which was polymd. with Placel FM 1 (CH<sub>2</sub>:CMeCO<sub>2</sub>CH<sub>2</sub>CH<sub>2</sub>O<sub>2</sub>CC<sub>5</sub>H<sub>10</sub>OH) 15.0, methacrylic acid 2.0, Me methacrylate 22.5, styrene 22.5, Bu acrylate 8.2, and hydroxyethyl methacrylate 19.8 g to give a multibranched polymer. A coating contg. the multibranched polymer and Cymel 712 (amino resin) showed long-lasting antisoiling effect against an oil-based ink.

IT 256223-89-9

RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(water-washable antisoiling coatings contg. multibranched polymers)

RN 256223-89-9 CAPLUS

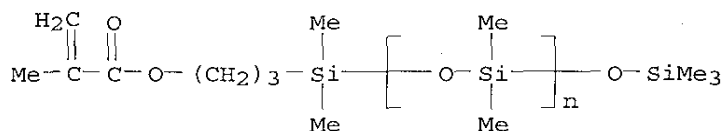
CN Hexanoic acid, 6-hydroxy-, 2-[(2-methyl-1-oxo-2-propenyl)oxy]ethyl ester, polymer with butyl 2-propenoate, .alpha.-[dimethyl[3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl]silyl]-.omega.-[(trimethylsilyl)oxypoly{oxy(dimethylsilylene)}], ethenylbenzene, formaldehyde, 2-hydroxyethyl 2-methyl-2-propenoate, methyl 2-methyl-2-propenoate, .alpha.- (2-methyl-1-oxo-2-propenyl)-.omega.-methoxypoly(oxy-1,2-ethanediyl), 2-methyl-2-propenoic acid and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 123109-42-2

CMF (C2 H6 O Si)<sub>n</sub> C12 H26 O3 Si2

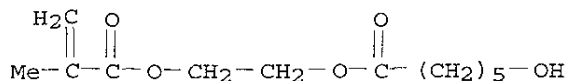
CCI PMS



CM 2

CRN 85099-10-1

CMF C12 H20 O5



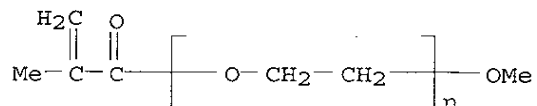
KOROMA EIC1700

CM 3

CRN 26915-72-0

CMF (C2 H4 O)n C5 H8 O2

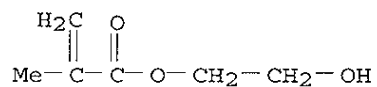
CCI PMS



CM 4

CRN 868-77-9

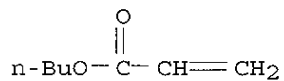
CMF C6 H10 O3



CM 5

CRN 141-32-2

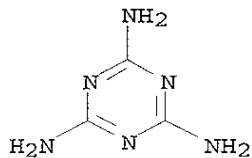
CMF C7 H12 O2



CM 6

CRN 108-78-1

CMF C3 H6 N6

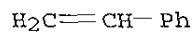


KOROMA EIC1700

CM 7

CRN 100-42-5

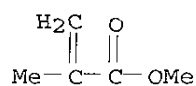
CMF C8 H8



CM 8

CRN 80-62-6

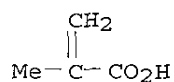
CMF C5 H8 O2



CM 9

CRN 79-41-4

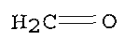
CMF C4 H6 O2



CM 10

CRN 50-00-0

CMF C H2 O



IC ICM C09D175-14

ICS C08G018-62

CC 42-10 (Coatings, Inks, and Related Products)

ST antisoiling coating multibranched polymer polyoxyalkylene

polysiloxane; acrylic polymer multibranched

polyoxyalkylene polysiloxane coating

IT Coating materials

KOROMA EIC1700

(antisoiling; water-washable antisoiling coatings contg. multibranched polymers)

IT Polysiloxanes, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (polyoxyalkylene-, graft, acrylic; water-washable antisoiling coatings contg. multibranched polymers)

IT Polyoxyalkylenes, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (polysiloxane-, graft, acrylic; water-washable antisoiling coatings contg. multibranched polymers)

IT 255896-98-1P  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (water-washable antisoiling coatings contg. multibranched polymers)

IT 256223-89-9  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
 (water-washable antisoiling coatings contg. multibranched polymers)

L45 ANSWER 31 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

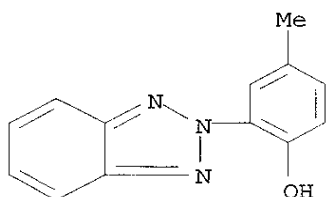
ACCESSION NUMBER: 2000:50060 CAPLUS  
 DOCUMENT NUMBER: 132:100486  
 TITLE: Image-enhancing composition for imaging and printing materials  
 INVENTOR(S): Kovacs, Gregory J.; Sprague, Robert A.; Malhotra, Shadi L.; Naik, Kirit N.; Lesani, Fereshteh; Boils, Danielle C.; Mayo, James D.; Drappel, Stephan V.  
 PATENT ASSIGNEE(S): Xerox Corporation, USA  
 SOURCE: Eur. Pat. Appl., 21 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 972651	A1	20000119	EP 1999-113734	19990713
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000198267	A2	20000718	JP 1999-195520	19990709
PRIORITY APPLN. INFO.:			US 1998-118573	A 19980717

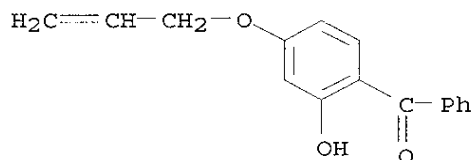
AB Disclosed is an image-enhancing compn. for imaging and printing materials, wherein the image-enhancing compn. contains a solvent, a polymeric binder, a dye mordant, a substantially water-sol. anticurl compd., a substantially water-sol. desizing compd., a lightfastness-improving compd., a defoamer, an optional biocide, and an optional filler.



IT 2440-22-4, 2-(2'-Hydroxy-5'-methylphenyl)benzotriazole  
 2549-87-3, 4-Allyloxy-2-hydroxybenzophenone  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink-jet printing materials treated with image-enhancing  
 compns. contg.)  
 RN 2440-22-4 CAPLUS  
 CN Phenol, 2-(2H-benzotriazol-2-yl)-4-methyl- (9CI) (CA INDEX NAME)



RN 2549-87-3 CAPLUS  
 CN Methanone, [2-hydroxy-4-(2-propenyloxy)phenyl]phenyl- (9CI) (CA INDEX NAME)



IC ICM B41M005-00  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 ST image enhancing compn ink jet printing material  
 IT Polyoxyalkylenes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (2-oleammonium chloride deric; ink-jet printing materials  
 treated with image-enhancing compns. contg.)  
 IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (di-Me, ethoxylated propoxylated, Alkasil NEP 73-70; ink-jet  
 printing materials treated with image-enhancing compns. contg.)  
 IT Ink-jet printing  
 (image-enhancing compns. for)  
 IT Polyoxyalkylenes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ink-jet printing materials treated with image-enhancing  
 compns. contg.)  
 IT 81-13-0, Pantothenol 105-59-9, N-Methyldiethanolamine 115-77-5D,  
 Pentaerythritol, tetrahydrobenzaldehyde acetal 122-96-3,  
 1,4-Bis(2-hydroxyethyl)piperazine 123-28-4, Didodecyl

3,3'-thiodipropionate 126-73-8, Tributyl phosphate, uses 126-86-3, Surfynol-104 128-04-1, Sodium dimethyldithiocarbamate 143-19-1D, Sodium oleate, sulfonated 147-47-7 533-74-4, 3,5-Dimethyltetrahydro-2H-1,3,5-thiadiazine-2-thione 1119-97-7, Myristyltrimethylammonium bromide 1606-85-5, 1,4-Bis(2-hydroxyethoxy)-2-butyne 2440-22-4, 2-(2'-Hydroxy-5'-methylphenyl)benzotriazole 2491-38-5, 2-Bromo-4'-hydroxyacetophenone 2549-87-3, 4-Allyloxy-2-hydroxybenzophenone 3010-24-0 3064-70-8, Bis(trichloromethyl)sulfone 4847-93-2, 3-Piperidino-1,2-propanediol 6317-18-6, Methylene bithiocyanate 7631-86-9, Colloidal silica, uses 9003-55-8, Butadiene-styrene copolymer 9004-62-0D, Hydroxyethylcellulose, cationic 9005-02-1, Polyethylene glycol dilaurate 21564-17-0, 2-(Thiocyanomethylthio)benzothiazole 25153-40-6, Maleic acid-vinyl methyl ether copolymer 25322-68-3D, Polyethylene glycol, 2-oleammonium chloride deriv. 25322-69-4, Alkapol PPG-4000 30388-01-3, 2-Hydroxypropyl methanethiosulfonate 36936-60-4, Ethoxylated triethanolamine 50586-59-9, Trimethylolpropane ethoxylate 51026-28-9, Potassium N-hydroxymethyl-N-methyldithiocarbamate 54590-62-4 79720-19-7 82973-76-0 87075-61-4, Erucyl erucamide 88797-00-6, 1,6-Hexamethylene bis(3,5-di-tert-butyl-4-hydroxyhydrocinnamate) 90751-07-8, Cyasorb UV-3346 101701-50-2, (2,2,6,6-Tetramethyl-4-piperidinyl) 1,2,3,4-butanetetracarboxylate 102524-70-9 106392-12-5, Ethylene oxide-propylene oxide block copolymer 145808-71-5, RX 31 152444-03-6, Surfynol-104S 254906-03-1 254906-05-3 254969-23-8, HX 42-3

RL: TEM (Technical or engineered material use); USES (Uses)  
(ink-jet printing materials treated with image-enhancing compns. contg.)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 32 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2000:43219 CAPLUS  
DOCUMENT NUMBER: 132:94413  
TITLE: Transparent plastic laminates having shielding layer  
INVENTOR(S): Nanri, Hiroyoshi  
PATENT ASSIGNEE(S): Tsutsumaka Plastic Industry Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000015755	A2	20000118	JP 1998-191301	19980707
PRIORITY APPLN. INFO.:			JP 1998-191301	19980707

AB A transparent plastic substrate has a colored resin layer (shielding layer) on a certain portion of the surface and also acrylic resin primer layer(s) and silicone hard coating layer(s) on at least the surface in this order, where the resins of the shielding layer are

crosslinked products prepd. by reaction of (A) curable compns. composed of vinyl chloride (I)-vinyl acetate (II) **copolymers** having .gtoreq.2 functional groups contg. active H and polyurethanes having .gtoreq.2 functional groups having active H and (B) polyisocyanates. Thus, a polycarbonate sheet was printed with an ink contg. polyisocyanate-crosslinked VIC (I-II **copolymer**/polyurethane blend) on the edge, heated, and press molded into an automobile rear window shape, then the product was dip-coated with an acrylic resin primer and further dip-coated with a silicone hard coating to give a laminate showing good solvent resistance and interlayer adhesion.

IT 196615-25-5P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(primer; hard-coated plastic sheets having shielding portion with good adhesion and solvent resistance)

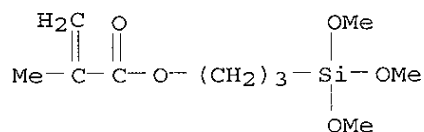
RN 196615-25-5 CAPLUS

CN 2-Propenoic acid, 2-methyl-, ethyl ester, polymer with  
(2,4-dihydroxyphenyl)phenylmethanone, 1,6-hexanediol and  
3-(trimethoxysilyl)propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 2530-85-0

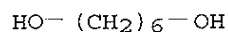
CMF C10 H20 O5 Si



CM 2

CRN 629-11-8

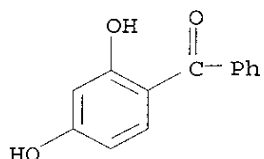
CMF C6 H14 O2



CM 3

CRN 131-56-6

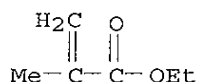
CMF C13 H10 O3



CM 4

CRN 97-63-2

CMF C6 H10 O2



- IC ICM B32B027-30
- ICS B32B007-02; B32B027-00; B32B027-36; B32B027-40
- CC 38-3 (Plastics Fabrication and Uses)
- Section cross-reference(s): 42
- ST polyisocyanate crosslink vinyl polymer polyurethane ink  
; automobile window polycarbonate shielding ink; solvent  
resistance hard coat polycarbonate window
- IT Primers (paints)  
(acrylic resins; hard-coated plastic sheets having shielding portion  
with good adhesion and solvent resistance)
- IT Windows  
(automotive; hard-coated plastic sheets having shielding portion with  
good adhesion and solvent resistance)
- IT Inks  
Solvent-resistant materials  
(hard-coated plastic sheets having shielding portion with good adhesion  
and solvent resistance)
- IT Glass substitutes  
Polycarbonates, uses  
RL: DEV (Device component use); USES (Uses)  
(hard-coated plastic sheets having shielding portion with good adhesion  
and solvent resistance)
- IT Polyurethanes, uses  
RL: PRP (Properties); TEM (Technical or engineered material use); USES  
(Uses)  
(inks, crosslinked with vinyl acetate-vinyl chloride  
copolymers; hard-coated plastic sheets having shielding portion  
with good adhesion and solvent resistance)
- IT Polysiloxanes, uses  
Polysiloxanes, uses  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or

engineered material use); PREP (Preparation); USES (Uses)  
 (silicate-, hard coats; hard-coated plastic sheets having shielding  
 portion with good adhesion and solvent resistance)

IT Coating materials  
 (silicones; hard-coated plastic sheets having shielding portion with  
 good adhesion and solvent resistance)

IT 177860-71-8P, Methyltrimethoxysilane-silica **copolymer**.  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or  
 engineered material use); PREP (Preparation); USES (Uses)  
 (hard coat; hard-coated plastic sheets having shielding portion with  
 good adhesion and solvent resistance)

IT 9003-22-9, Vinyl chloride-vinyl acetate **copolymer**  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
 (ink, crosslinked with polyurethanes and polyisocyanates;  
 hard-coated plastic sheets having shielding portion with good adhesion  
 and solvent resistance)

IT 215513-15-8, VIC  
 RL: PRP (Properties); TEM (Technical or engineered material use); USES  
 (Uses)  
 (ink, polyisocyanate-crosslinked; hard-coated plastic sheets  
 having shielding portion with good adhesion and solvent resistance)

IT 196615-25-5P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or  
 engineered material use); PREP (Preparation); USES (Uses)  
 (primer; hard-coated plastic sheets having shielding portion with good  
 adhesion and solvent resistance)

L45 ANSWER 33 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:819354 CAPLUS  
 DOCUMENT NUMBER: 132:64948  
 TITLE: Trisaryl-1,3,5-triazine ultraviolet light  
 absorbers containing hindered phenols  
 INVENTOR(S): Gupta, Ram B.; Jakiela, Dennis J.  
 PATENT ASSIGNEE(S): Cytec Technology Corp., USA  
 SOURCE: PCT Int. Appl., 101 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9967223	A2	19991229	WO 1999-US12758	19990607
WO 9967223	A3	20000302		
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,				

ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,  
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2333324	AA	19991229	CA 1999-2333324	19990607
AU 9944255	A1	20000110	AU 1999-44255	19990607
BR 9911448	A	20010320	BR 1999-11448	19990607
EP 1087947	A2	20010404	EP 1999-927321	19990607

R: BE, DE, ES, FR, GB, IT, NL, SE

JP 2002518485	T2	20020625	JP 2000-555877	19990607
TW 424104	B	20010301	TW 1999-88110160	19990617
US 6239275	B1	20010529	US 1999-335873	19990618

PRIORITY APPLN. INFO.:

US 1998-90259P P 19980622  
WO 1999-US12758 W 19990607

OTHER SOURCE(S): MARPAT 132:64948

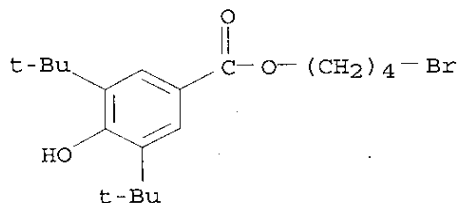
AB This invention relates generally to hindered phenol-substituted triazines and the use thereof to protect materials such as coatings, polymers, resins, org. compds. and the like against degrdn. by environmental forces, inclusive of UV light, actinic radiation, oxidn., moisture, atm. pollutants and combinations thereof. The new class of hindered phenol-substituted triazines includes a trisaryl-1,3,5-triazine in which one of the aryl groups is substituted by a group which comprises a hindered phenol or is a hindered phenol and is further substituted by a hydroxyl group, either free or blocked to form a latent stabilizer, ortho- to the point of attachment to the triazine. These materials may, under the appropriate circumstances, form oligomers. A method for stabilizing a material by incorporating such hindered phenol-substituted triazines is also disclosed.

IT 253137-70-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(trisaryl-1,3,5-triazine UV light absorbers contg. hindered phenols)

RN 253137-70-1 CAPLUS

CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, 4-bromobutyl ester (9CI) (CA INDEX NAME)



IC ICM C07D251-00

CC 37-6 (Plastics Manufacture and Processing)

ST hindered phenol trisaryl triazine UV stabilizer

IT Dyes

(org.; trisaryl-1,3,5-triazine UV light absorbers contg. hindered phenols)

IT Polyimides, properties

KOROMA EIC1700

Polyimides, properties  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(polyamide-; trisaryl-1,3,5-triazine UV light absorbers  
contg. hindered phenols)

IT Polyimides, properties  
Polyimides, properties  
Polysulfones, properties  
Polysulfones, properties  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(polyether-; trisaryl-1,3,5-triazine UV light absorbers  
contg. hindered phenols)

IT Polyamides, properties  
Polyamides, properties  
Polyethers, properties  
Polyethers, properties  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(polyimide-; trisaryl-1,3,5-triazine UV light absorbers  
contg. hindered phenols)

IT Polyethers, properties  
Polyethers, properties  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(polysulfone-; trisaryl-1,3,5-triazine UV light absorbers  
contg. hindered phenols)

IT Plastics, properties  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(thermoplastics; trisaryl-1,3,5-triazine UV light absorbers  
contg. hindered phenols)

IT Cosmetics  
Inks  
Paper  
Photographic paper  
UV stabilizers  
(trisaryl-1,3,5-triazine UV light absorbers contg. hindered  
phenols)

IT Alkyd resins  
Aminoplasts  
Epoxy resins, properties  
Natural rubber, properties  
Phenolic resins, properties  
Polyamides, properties  
Polycarbonates, properties  
Polyesters, properties  
Polyethers, properties  
Polyimides, properties  
Polyketones  
Polyolefins  
Polyoxymethylenes, properties  
Polyoxyphenylenes  
Polysiloxanes, properties  
Polysulfones, properties  
Polythiophenylenes  
Polyurethanes, properties

Synthetic rubber, properties

RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(trisaryl-1,3,5-triazine UV light absorbers contg. hindered phenols)

IT 100-42-5D, Styrene, **polymers**

RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(high-impact; trisaryl-1,3,5-triazine UV light absorbers contg. hindered phenols)

IT 253137-69-8P 253137-71-2P

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)  
(trisaryl-1,3,5-triazine UV light absorbers contg. hindered phenols)

IT 253137-70-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(trisaryl-1,3,5-triazine UV light absorbers contg. hindered phenols)

IT 9002-86-2, Polyvinylchloride 9003-08-1, Formaldehyde melamine copolymer 9003-17-2, Polybutadiene 9003-35-4, Formaldehyde phenol copolymer 9003-53-6, Polystyrene 9003-54-7, SAN polymer 9003-56-9, ABS 9004-36-8, Cellulose acetate butyrate 9011-05-6, Formaldehyde urea copolymer 25014-41-9, Polyacrylonitrile

RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(trisaryl-1,3,5-triazine UV light absorbers contg. hindered phenols)

IT 110-52-1 1421-49-4, 3,5-Di-tert-butyl-4-hydroxybenzoic acid 1668-53-7 23500-79-0

RL: RCT (Reactant); RACT (Reactant or reagent)  
(trisaryl-1,3,5-triazine UV light absorbers contg. hindered phenols)

L45 ANSWER 34 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1999:412802 CAPLUS

DOCUMENT NUMBER: 131:108912

TITLE: Reusable recording materials having heat-resistant and peelable **polymer** coatings

INVENTOR(S): Miyamoto, Ichiro

PATENT ASSIGNEE(S): Union Chemicar Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11174717	A2	19990702	JP 1997-362200	19971210
PRIORITY APPLN. INFO.:			JP 1997-362200	19971210

AB The materials are obtained by applying agents contg. heat-resistant and



peelable **polymer** binders and extenders on one or both sides of paper. Electrophotog. toners and thermal-transfer **inks** on the materials are easily removed by adhesive tapes.

IT 26160-89-4, Epostar S  
 RL: DEV (Device component use); USES (Uses)  
 (extenders; reusable recording paper having heat-resistant and peelable **polymer** coatings contg. extenders)

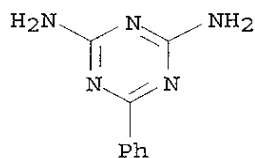
RN 26160-89-4 CAPLUS

CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA INDEX NAME)

CM 1

CRN 91-76-9

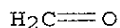
CMF C9 H9 N5



CM 2

CRN 50-00-0

CMF C H2 O



IC ICM G03G007-00

ICS G03G007-00; B41M005-40; G03G021-00

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST reusable recording material heat resistant **polymer** coating;

recycling copying paper peelable **polymer** coating

IT Silsesquioxanes

RL: DEV (Device component use); USES (Uses)

(Me, Tospearl 240; reusable recording paper having heat-resistant and peelable **polymer** coatings contg. extenders)

IT **Polysiloxanes**, uses

RL: DEV (Device component use); USES (Uses)

(acrylic, graft, Symac US 350; reusable recording paper having heat-resistant and peelable **polymer** coatings contg. extenders)

IT Polyurethanes, uses

Polyurethanes, uses

KOROMA EIC1700

RL: DEV (Device component use); USES (Uses)  
(polysiloxane-, Dai-Allomer SP 3050; reusable recording paper  
having heat-resistant and peelable polymer coatings contg.  
extenders)

IT Polysiloxanes, uses  
Polysiloxanes, uses  
RL: DEV (Device component use); USES (Uses)  
(polyurethane-, Dai-Allomer SP 3050; reusable recording paper having  
heat-resistant and peelable polymer coatings contg.  
extenders)

IT Paper  
(printing; reusable recording paper having heat-resistant and peelable  
polymer coatings contg. extenders)

IT Binders  
Copying paper  
Pigments, nonbiological  
(reusable recording paper having heat-resistant and peelable  
polymer coatings contg. extenders)

IT Fluoropolymers, uses  
RL: DEV (Device component use); USES (Uses)  
(reusable recording paper having heat-resistant and peelable  
polymer coatings contg. extenders)

IT Recycling  
(wastepaper; reusable recording paper having heat-resistant and  
peelable polymer coatings contg. extenders)

IT 9002-88-4, Polyethylene 9003-21-8, Methyl acrylate homopolymer  
26160-89-4, Epostar S  
RL: DEV (Device component use); USES (Uses)  
(extenders; reusable recording paper having heat-resistant and peelable  
polymer coatings contg. extenders)

IT 471-34-1, Calcium carbonate, uses 513-77-9, Barium carbonate  
7631-86-9, Silica, uses 14807-96-6, Talc, uses 127830-09-5, Crossnate  
D 70  
RL: DEV (Device component use); USES (Uses)  
(reusable recording paper having heat-resistant and peelable  
polymer coatings contg. extenders)

L45 ANSWER 35 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1999:298462 CAPLUS  
DOCUMENT NUMBER: 130:353795  
TITLE: Water-thinned marking pen inks giving images  
easily erasable by wiping with paper or cloths for  
writing boards  
INVENTOR(S): Nakamura, Hiroyuki; Hayashi, Hiroyuki  
PATENT ASSIGNEE(S): Pilot Ink Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11124529	A2	19990511	JP 1997-309673	19971023

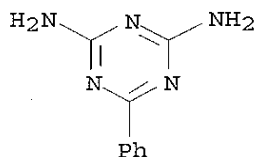
PRIORITY APPLN. INFO.: JP 1997-309673 19971023

AB Title **inks** contain (A) erasing agents selected from polyalkylene glycol monoether fatty acid esters, dicarboxylic acid bis(polyalkylene glycol monoether) esters, polyalkylene glycol fatty acid diesters, polyglycerin fatty acid esters, silicone oils, alkyl vinyl ethers, fatty acid K salts, and pentaerythritol fatty acid esters and (B) **polymer** particles (av. diam. 0.05-5 .mu.m). The **inks** on writing boards are easily erased even in incompletely dried state or after long time. Thus, a marking pen filled with an **ink** contg. carbon black dispersant 20, aq. resin 20, ethylene glycol monobutyl ether stearate emulsion 20, Silwet L 7607 (polyether-modified silicone oil) 1, poly(Me methacrylate) 10, and H2O 29% was used to make images on thermoplastic acrylic resin/silicone-coated boards, polypropylene film-laminated boards, or enameled boards. The images were completely erased even in semidry state or after 30 days using a dry cloth.

IT 91-76-9D, Benzoguanamine, **polymers**  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (particles; water-thinned erasable marking pen **inks** contg. erasing agents and **polymer** particles for writing boards)

RN 91-76-9 CAPLUS

CN 1,3,5-Triazine-2,4-diamine, 6-phenyl- (9CI) (CA INDEX NAME)



IC ICM C09D011-16

CC 42-12 (Coatings, Inks, and Related Products)

ST marking pen **ink** wiring board erasability; PMMA particle marking pen **ink**; ethylene glycol monobutyl stearate marking **ink**; silicone oil marking pen **ink**

IT Styrene-butadiene rubber, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (Nipol LX 407BP, particles, particles; water-thinned erasable marking pen **inks** contg. erasing agents and **polymer** particles for writing boards)

IT Polyurethanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (acrylic, particles; water-thinned erasable marking pen **inks** contg. erasing agents and **polymer** particles for writing boards)

IT Fatty acids, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (alkoxylated, monoethers, erasing agents; water-thinned erasable

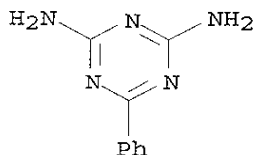
- marking pen inks contg. erasing agents and polymer particles for writing boards)
- IT Ethers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(alkyl vinyl, erasing agents; water-thinned erasable marking pen inks contg. erasing agents and polymer particles for writing boards)
- IT Polysiloxanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(di-Me, 3-hydroxypropyl Me, ethoxylated propoxylated, Silwet L 7607, erasing agents; water-thinned erasable marking pen inks contg. erasing agents and polymer particles for writing boards)
- IT Carboxylic acids, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(dicarboxylic, diesters, with polyalkylene glycol monoethers, erasing agents; water-thinned erasable marking pen inks contg. erasing agents and polymer particles for writing boards)
- IT Polyoxyalkylenes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(diesters with fatty acids, erasing agents; water-thinned erasable marking pen inks contg. erasing agents and polymer particles for writing boards)
- IT Polysiloxanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(erasing agents; water-thinned erasable marking pen inks contg. erasing agents and polymer particles for writing boards)
- IT Fatty acids, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(esters, erasing agents; water-thinned erasable marking pen inks contg. erasing agents and polymer particles for writing boards)
- IT Inks  
(marking; water-thinned erasable marking pen inks contg. erasing agents and polymer particles for writing boards)
- IT Polyoxyalkylenes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(mono(fatty acyl)-terminated, monoethers, erasing agents; water-thinned erasable marking pen inks contg. erasing agents and polymer particles for writing boards)
- IT Acrylic polymers, uses  
Aminoplasts  
Epoxy resins, uses  
Fluoropolymers, uses  
Phenolic resins, uses  
Polyamides, uses  
Polyesters, uses  
Polyurethanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(particles; water-thinned erasable marking pen inks contg. erasing agents and polymer particles for writing boards)

- IT Acrylic polymers, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (polyurethane-, particles; water-thinned erasable marking pen  
 inks contg. erasing agents and polymer particles for  
 writing boards)
- IT Fatty acids, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (potassium salts, erasing agents; water-thinned erasable marking pen  
 inks contg. erasing agents and polymer particles for  
 writing boards)
- IT 109-38-6, Ethylene glycol butyl ether stearate 115-77-5D,  
 Pentaerythritol, esters with fatty acids 141-18-4, Bis(ethylene glycol  
 monobutyl ether) adipate 143-18-0, Potassium oleate 822-28-6  
 25618-55-7D, Polyglycerin, esters with fatty acids 62125-22-8,  
 Pentaerythritol tetraisooctanoate 224785-05-1  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (erasing agents; water-thinned erasable marking pen inks  
 contg. erasing agents and polymer particles for writing  
 boards)
- IT 79-10-7D, Acrylic acid, derivs., polymers with styrene  
 91-76-9D, Benzoguanamine, polymers 100-42-5D, Styrene,  
 polymers with acrylic compds. 9002-84-0, Polytetrafluoroethylene  
 9002-86-2, Poly(vinyl chloride) 9002-88-4 9003-08-1,  
 Melamine-formaldehyde copolymer 9003-18-3,  
 Acrylonitrile-butadiene copolymer 9003-53-6 9003-55-8,  
 Butadiene-styrene copolymer 9011-14-7, Poly(methyl  
 methacrylate) 25014-41-9, Polyacrylonitrile  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (particles; water-thinned erasable marking pen inks contg.  
 erasing agents and polymer particles for writing boards)
- IT 9003-55-8  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (styrene-butadiene rubber, Nipol LX 407BP, particles, particles;  
 water-thinned erasable marking pen inks contg. erasing agents  
 and polymer particles for writing boards)

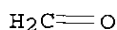
L45 ANSWER 36 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1999:23452 CAPLUS  
 DOCUMENT NUMBER: 130:140563  
 TITLE: Coating compositions and formation of cured films  
 therefrom  
 INVENTOR(S): Takami, Seiji; Koishibara, Tetsuya  
 PATENT ASSIGNEE(S): Kansai Paint Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 11001629 A2 19990106 JP 1997-156765 19970613  
 PRIORITY APPLN. INFO.: JP 1997-156765 19970613  
 AB The compns., useful for clear varnish of can exteriors, comprise (A) 5-100% (meth)acrylamide monomers H<sub>2</sub>C:CR<sub>3</sub>CONR<sub>2</sub>CH<sub>2</sub>OR<sub>1</sub> (R<sub>1</sub> = H, C<sub>1</sub>-8 alkyl; R<sub>2</sub> = H, CH<sub>2</sub>OR<sub>1</sub>; R<sub>3</sub> = H, Me) and 0-95% other unsatd. comonomers, (B) 5-50 parts/(100 parts A) amino resins having Mn 300-3000, and (C) 0.01-20 parts/(100 parts A) photoinitiators and are applied on a thermosetting oil ink layer on wet, irradiated with UV, and heated to form the cured film. Rapid coating can be performed without scattering of coating mist. Thus, styrene 250, Bu acrylate 195, 2-hydroxyethyl methacrylate 50, and acrylic acid 5 parts were polymd. in PhMe in the presence of AIBN to give a polyol resin, 40 parts of which was mixed with N-butoxymethylacrylamide 30, Viscoat 215 (neopentyl glycol diacrylate) 70, Cymel 1123 (Me Et etherified benzoguanamine resin) 30, Irgacure 184 5, dodecylbenzenesulfonic acid 0.5, and Paintad M (silicone wax) 0.5 part, applied on a tin-free steel sheet, which was partially coated with an alkyd resin ink, on wet, irradiated with UV, and baked to give a test piece showing pencil hardness 2 H and good gloss and adhesion.  
 IT 26160-89-4DP, Benzoguanamine resin, derivs., polymers with acrylic polyols, butoxymethylacrylamide, and neopentyl glycol diacrylate  
 RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical process); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); PROC (Process); USES (Uses)  
 (methylol(meth)acrylamide-based coating compns. and wet-on-wet coating process)  
 RN 26160-89-4 CAPLUS  
 CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 91-76-9  
 CMF C9 H9 N5



CM 2  
 CRN 50-00-0  
 CMF C H2 O



- IC ICM C09D004-06  
CC 42-7 (Coatings, Inks, and Related Products)  
ST methylol acrylamide **polymer** coating can exterior; two layer one  
bake coating acrylic  
IT Coating materials  
(UV-curable; methylol(meth)acrylamide-based coating compns. and  
wet-on-wet coating process)  
IT Epoxy resins, uses  
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical  
process); POF (Polymer in formulation); PRP (Properties); TEM (Technical  
or engineered material use); PREP (Preparation); PROC (Process); USES  
(Uses)  
(acrylic-polyester-; methylol(meth)acrylamide-based coating compns. and  
wet-on-wet coating process)  
IT Epoxy resins, uses  
Polyesters, uses  
Polyoxyalkylenes, uses  
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical  
process); POF (Polymer in formulation); PRP (Properties); TEM (Technical  
or engineered material use); PREP (Preparation); PROC (Process); USES  
(Uses)  
(acrylic; methylol(meth)acrylamide-based coating compns. and wet-on-wet  
coating process)  
IT **Polysiloxanes**, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(lubricants, Paintad M; methylol(meth)acrylamide-based coating compns.  
and wet-on-wet coating process)  
IT Cans  
Varnishes  
(methylol(meth)acrylamide-based coating compns. and wet-on-wet coating  
process)  
IT Coating materials  
(thermosetting; methylol(meth)acrylamide-based coating compns. and  
wet-on-wet coating process)  
IT Coating process  
(two-layer-one-bake; methylol(meth)acrylamide-based coating compns. and  
wet-on-wet coating process)  
IT **26160-89-4DP**, Benzoguanamine resin, derivs., **polymers**  
with acrylic polyols, butoxymethylacrylamide, and neopentyl glycol  
diacrylate 219703-33-0P 219703-34-1P 219703-35-2P 219703-36-3P  
219998-56-8P  
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical  
process); POF (Polymer in formulation); PRP (Properties); TEM (Technical  
or engineered material use); PREP (Preparation); PROC (Process); USES  
(Uses)  
(methylol(meth)acrylamide-based coating compns. and wet-on-wet coating  
process)  
IT 219703-32-9P  
RL: IMF (Industrial manufacture); PEP (Physical, engineering or chemical

process); PRP (Properties); TEM (Technical or engineered material use);  
 PREP (Preparation); PROC (Process); USES (Uses)  
 (methylo(meth)acrylamide-based coating compns. and wet-on-wet coating  
 process)

L45 ANSWER 37 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:564141 CAPLUS

DOCUMENT NUMBER: 129:182065

TITLE: Laminatable backing substrates containing paper  
 desizing agents for simulated photographic-quality  
 prints

INVENTOR(S): Malhotra, Shadi L.

PATENT ASSIGNEE(S): Xerox Corp., USA

SOURCE: U.S., 24 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

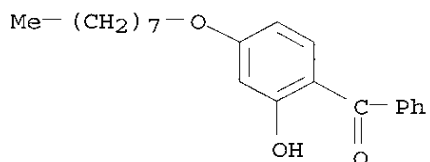
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

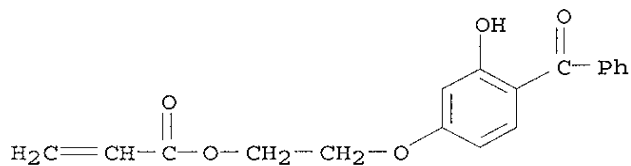
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5795696	A	19980818	US 1996-720656	19961002
PRIORITY APPLN. INFO.:			US 1996-720656	19961002
<p>AB Disclosed is a method of creating simulated photog.-quality prints using non-photog. imaging, said method comprising (a) providing a coated transparent substrate having a wrong reading toner image formed thereon using a non-photog. imaging process, (b) providing one surface of a backing substrate with a first coating comprising a <b>polymeric</b> adhesive binder having a glass transition temp. less than 55.degree., an antistatic agent, a <b>lightfastness</b>-inducing agent, and an optional filler, (c) providing said one surface of said backing substrate with a second coating in contact with said first coating wherein said second coating comprises a hydrophilic <b>polymer</b> having a m.p. of greater than 50.degree., and a paper desizing agent material having a m.p. of less than 75.degree., (d) providing a coating on another surface of said protective member opposite said one surface which is luminescent, antistatic, scuff resistant, and <b>lightfast</b>, and (e) adhering said substrates to each other by the application of heat and pressure.</p>				
<p>IT 1843-05-6 16432-81-8 29963-76-6,          Poly[2-(4-benzoyl-3-hydroxyphenoxy)ethyl acrylate] 67845-93-6,          Hexadecyl 3,5-di-tert-butyl-4-hydroxybenzoate          RL: TEM (Technical or engineered material use); USES (Uses)          (laminatable backing substrates for simulated photog.-quality print          prepn. contg.)</p>				
<p>RN 1843-05-6 CAPLUS</p>				
<p>CN Methanone, [2-hydroxy-4-(octyloxy)phenyl]phenyl- (9CI) (CA INDEX NAME)</p>				





RN 16432-81-8 CAPLUS  
 CN 2-Propenoic acid, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester (9CI) (CA INDEX NAME)

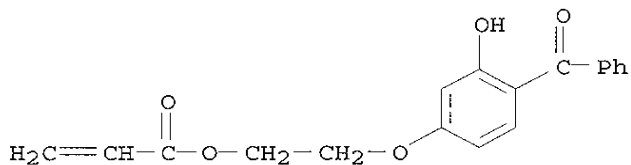


RN 29963-76-6 CAPLUS  
 CN 2-Propenoic acid, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester, homopolymer (9CI) (CA INDEX NAME)

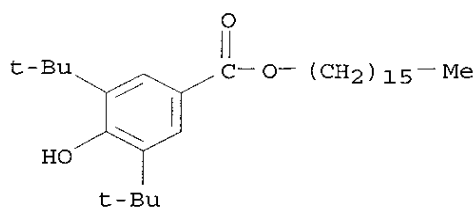
CM 1

CRN 16432-81-8

CMF C18 H16 O5



RN 67845-93-6 CAPLUS  
 CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, hexadecyl ester (9CI) (CA INDEX NAME)



IC ICM G03G013-16  
 NCL 430124000  
 CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 ST laminable paper support simulated photog print  
 IT Tall oil  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (N-hydroxyethylimidazoline edrivs.; laminatable backing substrates for simulated photog.-quality print prepn. contg.)  
 IT Aminoplasts  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (alkylated; laminatable backing substrates for simulated photog.-quality print prepn. contg.)  
 IT Amides, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (coco, N,N-bis(hydroxyethyl); laminatable backing substrates for simulated photog.-quality print prepn. contg.)  
 IT Amides, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (coco, N-(hydroxyethyl); laminatable backing substrates for simulated photog.-quality print prepn. contg.)  
 IT Fatty acids, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (coco, N-hydroxyethylimidazoline edrivs.; laminatable backing substrates for simulated photog.-quality print prepn. contg.)  
 IT Polysiloxanes, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (dialkyl; laminatable backing substrates for simulated photog.-quality print prepn. contg.)  
 IT Castor oil  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (ethoxylated; laminatable backing substrates for simulated photog.-quality print prepn. contg.)  
 IT Polyvinyl acetals  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (formals; laminatable backing substrates for simulated photog.-quality print prepn. contg.)  
 IT Electrophotography  
 Ink-jet printing  
 Photoimaging  
 (laminatable backing substrates contg. paper desizing agents for simulated photog.-quality print prepn. by)

- IT Aminoplasts  
Polyamides, uses  
Polyoxyalkylenes, uses  
Polyvinyl butyrals  
RL: TEM (Technical or engineered material use); USES (Uses)  
(laminatable backing substrates for simulated photog.-quality print  
prepn. contg.)
- IT Polysulfones, uses  
Polysulfones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polyether-; transparent supports for simulated photog.-quality prints  
with laminatable backing substrates contg. paper desizing agents)
- IT Polyethers, uses  
Polyethers, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(polysulfone-; transparent supports for simulated photog.-quality  
prints with laminatable backing substrates contg. paper desizing  
agents)
- IT Amines, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(soya alkyl; laminatable backing substrates for simulated  
photog.-quality print prep. contg.)
- IT Amides, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(soya, N,N-bis(hydroxyethyl); laminatable backing substrates for  
simulated photog.-quality print prep. contg.)
- IT Amines, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(tallow alkyl, ethoxylated; laminatable backing substrates for  
simulated photog.-quality print prep. contg.)
- IT Alcohols, uses  
Fatty acids, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(tallow, ethoxylated; laminatable backing substrates for simulated  
photog.-quality print prep. contg.)
- IT Cellophane  
(transparent supports for simulated photog.-quality prints with  
laminatable backing substrates contg. paper desizing agents)
- IT Polycarbonates, uses  
Polyesters, uses  
Polyimides, uses  
Polysulfones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(transparent supports for simulated photog.-quality prints with  
laminatable backing substrates contg. paper desizing agents)
- IT 9016-00-6, Dimethylsiloxane  
RL: TEM (Technical or engineered material use); USES (Uses)  
(block copolymers with poly(ethylene oxide),  
carbinol-terminated; laminatable backing substrates for simulated  
photog.-quality print prep. contg.)
- IT 88-24-4, 2,2'-Methylenabis(6-tert-butyl-4-ethylphenol) 88-27-7,  
2,6-Di-tert-butyl-4-(dimethylaminomethyl)phenol 112-80-1D,

9-Octadecenoic acid (9Z)-, N-hydroxyethylimidazoline edrivs., uses  
 119-47-1, 2,2'-Methylenebis(6-tert-butyl-4-methylphenol) 120-40-1,  
 Lauric diethanolamide 122-32-7, Glyceryl trioleate 123-28-4, Didodecyl  
 3,3'-thiodipropionate 142-78-9, Lauric monoethanolamide 471-34-1,  
 Calcium carbonate, uses 577-11-7, Sodium dioctyl sulfosuccinate  
 693-36-7, Dioctadecyl 3,3'-thiodipropionate 695-10-3D, coco and oleic  
 and tall oil derivs. 1314-13-2, Zinc oxide, uses 1314-23-4, Zirconium  
 oxide, uses 1314-98-3, Zinc sulfide, uses 1338-39-2, Sorbitan  
 monolaurate 1338-43-8, Sorbitan monooleate 1344-28-1D, Alumina,  
 hydrated 1709-70-2, 1,3,5-Trimethyl-2,4,6-tris(3,5-di-tert-butyl-4-  
 hydroxybenzyl)benzene 1843-05-6 4229-35-0 7631-86-9, Silica,  
 uses 7727-43-7, Barium sulfate 7789-75-5, Calcium fluoride, uses  
 9002-88-4 9002-92-0, Lauryl alcohol ethoxylate 9003-08-1,  
 Formaldehyde-melamine copolymer 9003-09-2, Poly(methyl vinyl  
 ether) 9003-11-6, Ethylene oxide-propylene oxide copolymer  
 9003-17-2, Polybutadiene 9003-17-2D, Polybutadiene, dicarboxy-terminated  
 9003-17-2D, Polybutadiene, phenyl-terminated 9003-18-3,  
 Acrylonitrile-butadiene copolymer 9003-20-7, Poly(vinyl  
 acetate) 9003-21-8, Poly(methyl acrylate) 9003-27-4 9003-28-5,  
 Poly(1-butene) 9003-31-0, Polyisoprene 9003-32-1, Poly(ethyl acrylate)  
 9003-42-3, Poly(ethyl methacrylate) 9003-44-5, Poly(isobutyl vinyl  
 ether) 9003-47-8, Poly(vinylpyridine) 9003-49-0, Poly(butyl acrylate)  
 9003-53-6, Polystyrene 9003-54-7, Acrylonitrile-styrene  
 copolymer 9003-55-8, Butadiene-styrene copolymer  
 9003-56-9, Acrylonitrile-butadiene-styrene copolymer  
 9003-63-8, Poly(butyl methacrylate) 9003-77-4, Poly(2-ethylhexyl  
 acrylate) 9003-95-6, Poly(vinyl stearate) 9004-36-8, Cellulose acetate  
 butyrate 9004-38-0, Cellulose acetate hydrogen phthalate 9004-41-5,  
 Cyanoethylated cellulose 9004-48-2, Cellulose propionate 9004-57-3,  
 Ethylcellulose 9004-74-4 9004-81-3, Poly(ethylene glycol) monolaurate  
 9004-96-0, Poly(ethylene glycol) monooleate 9004-98-2 9005-02-1,  
 Poly(ethylene glycol) dilaurate 9005-07-6, Poly(ethylene glycol)  
 dioleate 9005-64-5, Poly(oxyethylene) sorbitan monolaurate 9005-65-6,  
 Poly(oxyethylene) sorbitan monooleate 9005-70-3, Poly(oxyethylene)  
 sorbitan trioleate 9006-26-2, Maleic anhydride-ethylene  
 copolymer 9010-79-1, Ethylene-propylene copolymer  
 9010-85-9, Isobutylene-isoprene copolymer 9010-86-0,  
 Ethylene-ethyl acrylate copolymer 9011-05-6, Formaldehyde-urea  
 copolymer 9011-05-6D, Formaldehyde-urea copolymer,  
 alkylated 9011-06-7, Vinyl chloride-vinylidene chloride  
 copolymer 9011-14-7, Poly(methyl methacrylate) 9011-16-9,  
 Maleic anhydride-methyl vinyl ether copolymer 9011-53-4, Butyl  
 methacrylate-isobutyl methacrylate copolymer 9016-45-9, Nonyl  
 phenol ethoxylate 9017-21-4, Poly(vinyltoluene) 9019-70-9,  
 Styrene-vinylpyridine copolymer 9022-52-0, Poly(chlorostyrene)  
 9036-19-5, Octyl phenol ethoxylate 9036-63-9, Poly(isooctyl acrylate)  
 9050-31-1, Hydroxypropylmethyl cellulose phthalate 9053-30-9,  
 Poly(tert-butylstyrene) 10101-39-0 10595-72-9, Ditridecyl  
 3,3'-thiodipropionate 13463-67-7, Titanium dioxide, uses 14995-49-4  
 16432-81-8 16545-54-3 24936-41-2, Poly(4-methylstyrene)  
 24936-97-8, Poly(1,4-butylene adipate) 24937-05-1, Poly(ethylene  
 adipate) 24937-78-8, Ethylene-vinyl acetate copolymer

24938-37-2, Poly(ethylene adipate) 24938-67-8, Poly(2,6-dimethyl  
 p-phenylene oxide) 24969-10-6, Epichlorohydrin-ethylene oxide  
 copolymer 24979-82-6, Poly(propyl acrylate) 24991-55-7,  
 Poly(ethylene glycol dimethyl ether) 25014-31-7, Poly(.alpha.-  
 methylstyrene) 25035-78-3, Poly(diallyl isophthalate) 25035-84-1,  
 Poly(vinyl propionate) 25036-21-9, Poly(benzyl acrylate) 25037-78-9,  
 Ethylene-vinyl chloride copolymer 25053-15-0, Poly(diallyl  
 phthalate) 25086-48-0, Vinyl acetate-vinyl alcohol-vinyl chloride  
 copolymer 25087-17-6, Poly(hexyl methacrylate) 25103-87-1,  
 Poly(1,4-butylene adipate) 25119-62-4, Allyl alcohol-styrene  
 copolymer 25153-40-6, Maleic acid-methyl vinyl ether  
 copolymer 25189-01-9, Poly(phenyl methacrylate) 25213-24-5,  
 Vinyl acetate-vinyl alcohol copolymer 25213-39-2, Butyl  
 methacrylate-styrene copolymer 25232-27-3, Poly(tert-butyl  
 acrylate) 25249-16-5, Poly(2-hydroxyethyl methacrylate) 25266-02-8,  
 Maleic anhydride-1-octadecene copolymer 25266-13-1, Poly(octyl  
 acrylate) 25322-68-3 25322-69-4 25496-72-4, Glyceryl monooleate  
 25569-53-3, Poly(ethylene succinate) 25587-82-0, Poly(2,4,6-  
 tribromostyrene) 25609-74-9, Poly(propyl methacrylate) 25637-84-7,  
 Glyceryl dioleate 25639-21-8, Poly(octadecyl methacrylate) 25667-11-2,  
 Poly(ethylene succinate) 25719-51-1, Poly(2-ethylhexyl methacrylate)  
 25719-52-2, Poly(lauryl methacrylate) 25721-76-0, Poly(ethylene glycol  
 dimethacrylate) 25852-47-5 25852-49-7, Poly(propylene glycol  
 dimethacrylate) 25986-77-0, Poly(octadecyl acrylate) 26022-14-0,  
 Poly(2-hydroxyethyl acrylate) 26124-32-3, Poly(isopropyl acrylate)  
 26246-92-4, Poly(lauryl acrylate) 26264-05-1, Isopropylamine  
 dodecylbenzenesulfonate 26264-06-2, Calcium dodecylbenzenesulfonate  
 26266-58-0, Sorbitan trioleate 26403-72-5, Poly(ethylene glycol  
 diglycidyl ether) 26570-48-9 26715-88-8, Poly(vinyl pivalate)  
 26716-20-1, Poly(tert-butylaminoethyl methacrylate) 26760-99-6,  
 Poly(ethylene azelate) 26762-07-2, Poly(ethylene azelate) 27103-47-5,  
 Poly(hexyl acrylate) 27458-65-7, Poly(cyclohexyl acrylate) 27516-89-8  
 28158-21-6, Poly(trimethylene succinate) 28265-35-2, Butadiene-maleic  
 acid copolymer 28406-56-6, Poly(2-vinylnaphthalene)  
 28628-64-0, Poly(2-methoxyethyl acrylate) 28725-67-9, Poly(trimethylene  
 succinate) 28725-68-0 29320-53-4, Poly(decyl methacrylate)  
 29500-86-5, Poly(decyl acrylate) 29963-76-6,  
 Poly[2-(4-benzoyl-3-hydroxyphenoxy)ethyl acrylate] 32628-06-1  
 36221-42-8, Poly(trimethylene adipate) 36568-42-0, Poly(trimethylene  
 adipate) 37200-12-7, Poly(isodecyl methacrylate) 39350-27-1,  
 Poly(bromostyrene) 40601-76-1 52234-59-0, Poly(trimethylene glutarate)  
 52256-48-1, Poly(trimethylene glutarate) 52985-34-9, Polychloroisoprene  
 53761-76-5, Butyl methacrylate-4-vinylpyridine copolymer  
 54841-40-6, Poly(isodecyl acrylate) 62501-03-5, Poly(hydroxypropyl  
 acrylate) 66987-22-2, Poly(vinyl neodecanoate) 67845-93-6,  
 Hexadecyl 3,5-di-tert-butyl-4-hydroxybenzoate 71599-31-0,  
 Poly(methoxystyrene) 72779-48-7, Hydroxyethylcellulose methacrylate  
 79720-19-7 82451-48-7 91313-01-8 93792-59-7, Hydroxypropylmethyl  
 cellulose succinate 106917-30-0 106917-31-1 111483-45-5,  
 Hydroxyethylcellulose acrylate 122269-49-2, Ethylene oxide-isoprene  
 block copolymer 145332-37-2, Ethylene oxide-2-hydroxyethyl  
 methacrylate block copolymer 201798-70-1, Ethylene

oxide-hydroxypropyl methacrylate block copolymer

RL: TEM (Technical or engineered material use); USES (Uses)

(laminatable backing substrates for simulated photog.-quality print  
prepn. contg.)

IT 9002-86-2, Poly(vinyl chloride) 9003-07-0, Polypropylene 9012-09-3,  
Cellulose triacetate 9020-32-0, Polyethylene naphthalate 9020-73-9  
24981-14-4, Poly(vinyl fluoride)

RL: TEM (Technical or engineered material use); USES (Uses)

(transparent supports for simulated photog.-quality prints with  
laminatable backing substrates contg. paper desizing agents)

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 38 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:58851 CAPLUS

DOCUMENT NUMBER: 128:129353

TITLE: Coated papers with hydrophobic barrier layers and  
image receiving coatings

INVENTOR(S): Malhotra, Shadi L.

PATENT ASSIGNEE(S): Xerox Corp., USA

SOURCE: U.S., 20 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

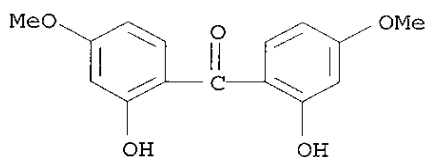
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5709976	A	19980120	US 1996-656814	19960603
PRIORITY APPLN. INFO.:			US 1996-656814	19960603
AB Coated paper comprises (a) a substrate; (b) a hydrophobic barrier layer comprised of a water insol. component and a water or alc. sol. anticurl agent, the hydrophobic barrier layer being present on both sides of the substrate; (c) image receiving coatings situated on the top of both hydrophobic barrier layers, the image receiving coatings being suitable for receiving images of an aq. ink, the coatings comprising (1) a polymeric binder, (2) a dye fixative, (3) a filler, (4) a lightfastness inducing agent, and (5) a biocide. The coated papers are also suitable for receiving images developed with electrostatic toner compns. where the coatings comprise (1) a polymeric binder, (2) an antistatic agent, (3) a lightfastness inducing agent, (4) a pigment, and (5) an optional biocide.				
IT 131-54-4, 2,2'-Dihydroxy-4,4'-dimethoxy benzophenone				
131-57-7, 2-Hydroxy-4-methoxy benzophenone 1843-05-6,				
2-Hydroxy-4-(octyloxy)benzophenone 2440-22-4,				
2-(2'-Hydroxy-5'-methylphenyl)benzotriazole 2549-87-3,				
4-Allyloxy-2-hydroxybenzophenone 2985-59-3, 2-Hydroxy-4-				
dodecyloxy benzophenone 3864-99-1 6969-49-9, Octyl				
salicylate 16432-81-8, 2-(4-Benzoyl-3-				
hydroxyphenoxy)ethylacrylate 29963-76-6, Poly[2-(4-benzoyl-3-				

hydroxyphenoxy)ethylacrylate] 67845-93-6, Hexadecyl  
3,5-di-tert-butyl-4-hydroxybenzoate 70321-86-7  
103597-45-1

RL: TEM (Technical or engineered material use); USES (Uses)  
(coated papers with hydrophobic barrier layers and image receiving  
coatings)

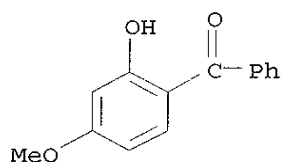
RN 131-54-4 CAPLUS

CN Methanone, bis(2-hydroxy-4-methoxyphenyl)- (9CI) (CA INDEX NAME)



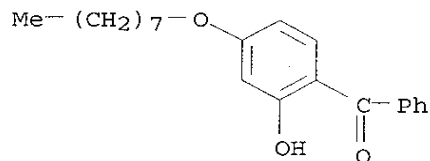
RN 131-57-7 CAPLUS

CN Methanone, (2-hydroxy-4-methoxyphenyl)phenyl- (9CI) (CA INDEX NAME)



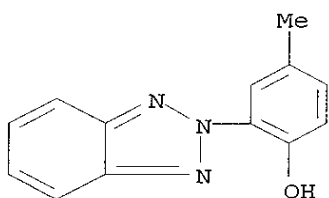
RN 1843-05-6 CAPLUS

CN Methanone, [2-hydroxy-4-(octyloxy)phenyl]phenyl- (9CI) (CA INDEX NAME)

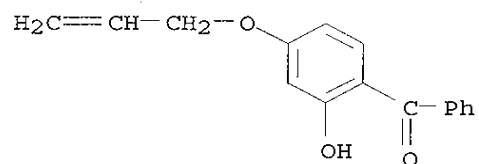


RN 2440-22-4 CAPLUS

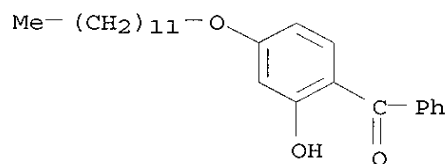
CN Phenol, 2-(2H-benzotriazol-2-yl)-4-methyl- (9CI) (CA INDEX NAME)



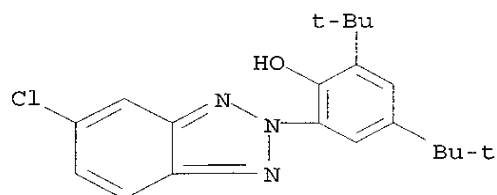
RN	2549-87-3	CAPLUS		
CN	Methanone, [2-hydroxy-4-(2-propenyloxy)phenyl]phenyl-	(9CI)	(CA INDEX	
	NAME)			



RN	2985-59-3	CAPLUS		
CN	Methanone, [4-(dodecyloxy)-2-hydroxyphenyl]phenyl-	(9CI)	(CA INDEX NAME)	



RN 3864-99-1 CAPLUS  
CN Phenol, 2-(5-chloro-2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)-  
(9CI) (CA INDEX NAME)

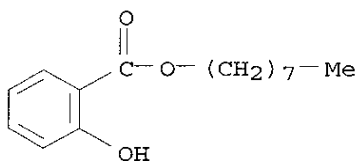


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RN      6969-49-9    CAPLUS
CN      Benzoic acid, 2-hydroxy-, octyl ester (9CI)  (CA INDEX NAME)

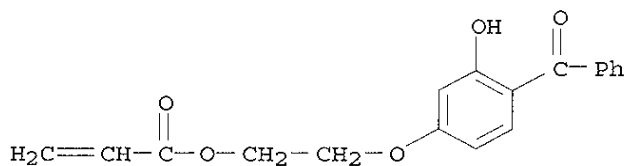
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RN 16432-81-8 CAPLUS

CN 2-Propenoic acid, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester (9CI) (CA INDEX NAME)



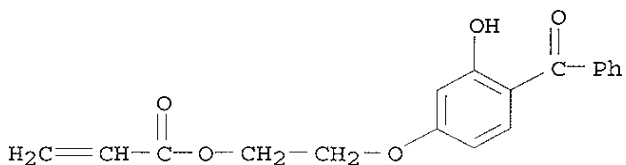
RN 29963-76-6 CAPLUS

CN 2-Propenoic acid, 2-(4-benzoyl-3-hydroxyphenoxy)ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

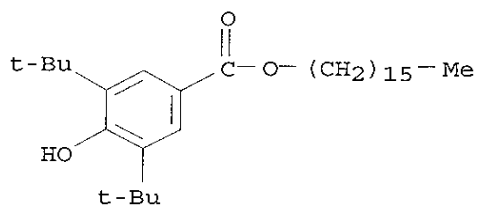
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CMF C18 H16 O5



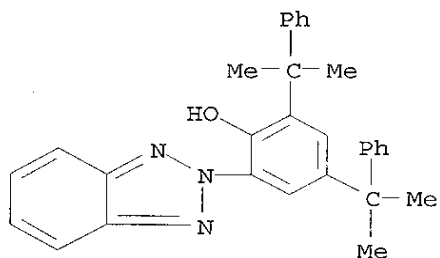
RN 67845-93-6 CAPLUS

CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, hexadecyl ester (9CI) (CA INDEX NAME)



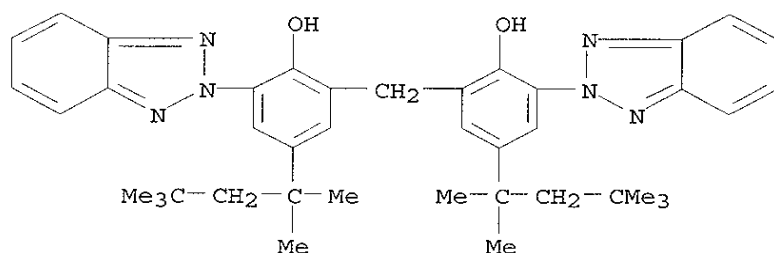
RN 70321-86-7 CAPLUS

CN Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1-methyl-1-phenylethyl)- (9CI)  
(CA INDEX NAME)



RN 103597-45-1 CAPLUS

CN Phenol, 2,2'-methylenebis[6-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)- (9CI) (CA INDEX NAME)



IC ICM B41M005-00

ICS B41J002-01

NCL 430124000

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)

Section cross-reference(s): 74

ST coated paper hydrophobic barrier layer; image receiving coating paper

IT Aminoplasts

Fluorescent pigments

Gelatins, uses

Paraffin waxes, uses

KOROMA EIC1700

- Polyesters, uses
- Polyoxyalkylenes, uses
- Polyurethanes, uses
- Polyvinyl butyrals
- Rubber, uses
- RL: TEM (Technical or engineered material use); USES (Uses)  
(coated papers with hydrophobic barrier layers and image receiving coatings)
- IT Paper  
(coated; coated papers with hydrophobic barrier layers and image receiving coatings)
- IT Collagens, uses
- RL: TEM (Technical or engineered material use); USES (Uses)  
(di-Me ammonium hydrolyzed; coated papers with hydrophobic barrier layers and image receiving coatings)
- IT Polysiloxanes, uses
- RL: TEM (Technical or engineered material use); USES (Uses)  
(di-Me, Me stearyl; coated papers with hydrophobic barrier layers and image receiving coatings)
- IT Phenolic resins, uses
- Soda-lime glasses
- RL: TEM (Technical or engineered material use); USES (Uses)  
(microspheres; coated papers with hydrophobic barrier layers and image receiving coatings)
- IT Clays, uses
- RL: TEM (Technical or engineered material use); USES (Uses)  
(montmorillonitic, organophilic; coated papers with hydrophobic barrier layers and image receiving coatings)
- IT Ionene polymers
- RL: TEM (Technical or engineered material use); USES (Uses)  
(poly(ethylene oxide)-; coated papers with hydrophobic barrier layers and image receiving coatings)
- IT Imines
- RL: TEM (Technical or engineered material use); USES (Uses)  
(polyimines, ethoxylated; coated papers with hydrophobic barrier layers and image receiving coatings)
- IT Electrophotographic paper  
(receptor; coated papers with hydrophobic barrier layers and image receiving coatings)
- IT Glass microspheres
- Glass microspheres
- RL: TEM (Technical or engineered material use); USES (Uses)  
(sodium borosilicate; coated papers with hydrophobic barrier layers and image receiving coatings)
- IT Borosilicate glasses
- Borosilicate glasses
- RL: TEM (Technical or engineered material use); USES (Uses)  
(sodium, microspheres; coated papers with hydrophobic barrier layers and image receiving coatings)
- IT 58-95-7, Vitamin E acetate 59-47-2 60-12-8, Phenethyl alcohol  
64-19-7D, Acetic acid, coco fatty acid derivs., uses 64-20-0,  
Tetramethyl ammonium bromide 77-93-0, Triethyl citrate 77-99-6

78-21-7 78-66-0, 3,6-Dimethyl-4-octyne-3,6-diol 81-13-0, Pantothenol  
 93-56-1, 1-Phenyl-1,2-ethanediol 102-71-6, uses 102-79-4, N-Butyl  
 diethanolamine 105-59-9, N-Methyl diethanolamine 109-16-0 110-30-5  
 110-31-6 112-03-8, Stearyl trimethyl ammonium chloride 112-84-5,  
 Erucamide 115-84-4, 2-Butyl-2-ethyl-1,3-propanediol 120-07-0, N-Phenyl  
 diethanolamine 122-96-3, 1-4-Bis(2-hydroxyethyl)piperazine 123-34-2,  
 3-Allyloxy-1,2-propanediol 124-26-5, Stearamide 126-86-3,  
 2,4,7,9-Tetramethyl-5-decyne-4,7-diol 131-54-4,  
 2,2'-Dihydroxy-4,4'-dimethoxy benzophenone 131-57-7,  
 2-Hydroxy-4-methoxy benzophenone 136-36-7, Resorcinol mono benzoate  
 136-44-7, Glycerol p-amino benzoate 139-87-7, N-Ethyl diethanolamine  
 144-19-4, 2,2,4-Trimethyl-1,3-pentanediol 300-92-5, Aluminum distearate  
 301-02-0, Oleamide 471-34-1, Calcium carbonate, uses 538-43-2,  
 3-Phenoxy-1,2-propanediol 539-48-0, p-Xylylene diamine 541-22-0,  
 Decamethylene bis trimethyl ammonium bromide 544-62-7,  
 3-Octadecyloxy-1,2-propanediol 546-93-0, Magnesium carbonate 557-04-0,  
 Magnesium stearate 557-05-1, Zinc stearate 616-30-8,  
 3-Amino-1,2-propanediol 621-56-7, 3-(Diethylamino)-1,2-propanediol  
 623-39-2, 3-Methoxy-1,2-propanediol 657-84-1, Sodium toluene sulfonate  
 822-16-2, Sodium stearate 1116-76-3, Trioctylamine 1119-97-7, Myristyl  
 trimethyl ammonium bromide 1300-72-7, Sodium xylene sulfonate  
 1309-48-4, Magnesium oxide, uses 1314-13-2, Zinc oxide, uses  
 1314-98-3, Zinc sulfide, uses 1327-33-9, Antimony oxide 1327-43-1,  
 Magnesium aluminum silicate 1344-95-2, Calcium silicate 1406-18-4,  
 Vitamin E 1455-42-1 1530-32-1, Ethyl triphenyl phosphonium bromide  
 1530-45-6, Carbethoxymethyl triphenyl phosphonium bromide 1592-23-0,  
 Calcium stearate 1606-85-5, 1,4-Bis(2-hydroxyethoxy)-2-butyne  
 1843-05-6, 2-Hydroxy-4-(octyloxy)benzophenone 1874-62-0,  
 3-Ethoxy-1,2-propanediol 2065-67-0, Tetra phenyl phosphonium iodide  
 2380-78-1, Homovanillyl alcohol 2390-68-3, Didecyl dimethyl ammonium  
 bromide 2440-22-4, 2-(2'-Hydroxy-5'-methylphenyl)benzotriazole  
 2549-87-3, 4-Allyloxy-2-hydroxybenzophenone 2985-59-3,  
 2-Hydroxy-4-dodecyloxy benzophenone 3061-75-4, Behenamide 3290-92-4  
 3433-37-2, 2-Piperidine methanol 3864-99-1 4217-66-7,  
 2-Phenyl-1,2-propanediol 4704-94-3, 2-(Hydroxymethyl)-1,3-propanediol  
 4762-26-9, Hexyl triphenyl phosphonium bromide 4847-93-2,  
 3-Piperidino-1,2-propanediol 5350-96-9, 4-Nitrobenzyl trimethyl ammonium  
 chloride 6425-32-7, 3-Morpholino-1,2-propanediol 6712-98-7  
 6834-92-0, Sodium metasilicate 6969-49-9, Octyl salicylate  
 7173-51-5, Didecyl dimethyl ammonium chloride 7237-34-5, 2-Hydroxyethyl  
 triphenyl phosphonium bromide 7727-43-7, Barium sulfate 7789-75-5,  
 Calcium fluoride, uses 9000-01-5, Gum arabic 9000-07-1, Carrageenan  
 9000-36-6, Karaya gum 9002-18-0, Agar-agar 9002-86-2, Vinyl chloride  
**homopolymer** 9002-89-5, Poly(vinyl alcohol) 9002-98-6  
 9003-05-8, Poly(acrylamide) 9003-06-9 9003-08-1, Melamine-formaldehyde  
 resin 9003-11-6 9003-18-3, Butadiene-acrylonitrile **copolymer**  
 9003-20-7, Polyvinyl acetate 9003-20-7D, Vinyl acetate  
**homopolymer**, carboxylated 9003-39-8, Poly(vinyl pyrrolidone)  
 9003-53-6, Polystyrene 9003-55-8, Styrene-butadiene **copolymer**  
 9003-56-9, Butadiene-acrylonitrile-styrene **terpolymer**  
 9004-32-4, Sodium carboxymethyl cellulose 9004-58-4, Ethyl hydroxyethyl  
 cellulose 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl

cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9005-22-5, Sodium cellulose sulfate 9005-25-8, Starch, uses 9005-27-0, Hydroxyethyl starch 9006-26-2, Ethylene-maleic anhydride copolymer 9006-65-9D, Dimethicone, behenoxy 9006-65-9D, Dimethicone, cetyl 9006-65-9D, Dimethicone, stearoxy 9011-05-6, Urea-formaldehyde resin 9011-13-6 9011-16-9, Vinyl methyl ether-maleic anhydride copolymer 9012-76-4, Chitosan 9013-34-7, Diethyl aminoethyl cellulose 9015-11-6, Benzyl cellulose 9015-73-0, Diethyl aminoethyl dextran 9032-42-2, Hydroxyethyl methyl cellulose 9033-69-6, Amino deoxycellulose 9036-94-6, Chlorodeoxycellulose 9041-56-9, Hydroxy butylmethyl cellulose 9044-05-7, Carboxymethyl dextran 9049-76-7, Hydroxypropyl starch 9051-49-4, Propoxylated pentaerythritol 9088-04-4, Sodium carboxymethylhydroxyethyl cellulose 10094-45-8, Stearyl erucamide 10213-79-3, Sodium metasilicate pentahydrate 10353-86-3 11138-66-2, Xanthan 12001-79-5, Vitamin K 12047-27-7, Barium titanate, uses 13276-08-9, Stearyl stearamide 13349-82-1, 1-[2-(2-Hydroxyethoxy)ethyl]-piperazine 13463-67-7, Titanium dioxide, uses 13927-77-0, Nickel dibutyldithiocarbamate 14690-00-7, 2-Benzyloxy-1,3-propanediol 15625-89-5, Trimethylolpropane triacrylate 16106-44-8, Potassium toluene sulfonate 16260-09-6, Oleyl palmitamide 16432-81-8, 2-(4-Benzoyl-3-hydroxyphenoxy)ethylacrylate 16841-14-8 17131-52-1, 3-(4-Methoxy phenoxy)-1,2-propanediol 21645-51-2, Hydrated alumina, uses 24969-10-6, Epichlorohydrin-ethylene oxide copolymer 25037-78-9, Ethylene-vinyl chloride copolymer 25086-29-7 25086-89-9, Vinyl pyrrolidone-vinyl acetate copolymer 25153-40-6, Vinylmethylether-maleic acid copolymer 25213-24-5, Vinyl alcohol-vinyl acetate copolymer 25322-68-3 25791-96-2 25805-17-8, Poly(2-ethyl-2-oxazoline) 26336-38-9, Poly(vinylamine) 26447-10-9, Ammonium xylene sulfonate 26793-34-0, Poly(N,N-dimethyl acrylamide) 27119-07-9, Poly(2-acrylamide-2-methyl propane sulfonic acid) 27676-62-6 28132-01-6, 4-8-Bis(hydroxymethyl)tricyclo[5.2.1.0<sup>2,6</sup>]decane 28265-35-2, Butadiene-maleic acid copolymer 28728-55-4, 1,5-Dimethyl-1,5-diaza undecamethylene polymethobromide 28961-43-5, Trimethylolpropane ethoxylate triacrylate 29690-74-2, Poly(vinyl phosphate) 29963-76-6, Poly[2-(4-benzoyl-3-hydroxyphenoxy)ethylacrylate] 30346-73-7, Potassium xylene sulfonate 30947-30-9 32073-22-6, Sodium cumene sulfonate 33950-46-8 36729-43-8 36936-60-4, Ethoxylated triethanolamine 37293-51-9, Amino dextran 37337-45-4 37767-39-8, Tetra sodium N-(1,2-dicarboxyethyl)-N-octadecyl sulfosuccinamate 39454-79-0, Carboxymethyl hydroxypropyl guar 40817-03-6, p-Xylylene bis(triphenyl phosphonium bromide) 42503-45-7 47525-34-8D, salts 50586-59-9, Ethoxylated trimethylolpropane 51331-09-0, Hydroxypropyl hydroxyethyl cellulose 51811-79-1 52479-58-0 53879-54-2, Trimethylolpropane propoxylate triacrylate 54351-50-7 58205-99-5, Ethylene oxide-propylene oxide copolymer pentaerythritol ether 60278-98-0 63462-99-7, Tetra octadecyl ammonium bromide 64022-61-3 65816-20-8 67845-93-6, Hexadecyl 3,5-di-tert-butyl-4-hydroxybenzoate 70321-86-7 70340-04-4, 2-Hydroxybenzyl triphenyl phosphonium bromide 71029-16-8 79720-19-7 82451-48-7 82973-76-0 85391-19-1, 3-Pyrrolidino-1,2-propanediol 85721-30-8 87075-61-4, Erucyl erucamide 95548-49-5 96352-14-6,

Phenyl cellulose 103597-45-1 105287-89-6 106158-22-9  
 106917-30-0 106917-31-1 107498-00-0, Ethylene oxide-propylene oxide  
 block copolymer glycerol ether 113277-70-6,  
 Poly(N,N-dimethyl-3,5-dimethylene piperidinium chloride) 117172-48-2  
 121786-16-1, Ethylene oxide-vinyl alcohol graft copolymer  
 122269-49-2, Ethylene oxide-isoprene block copolymer  
 136462-13-0 137053-35-1 139011-48-6, (Diethylamino)methyl  
 methacrylate-vinyl pyrrolidone copolymer 145332-37-2, Ethylene  
 oxide-2-hydroxyethyl methacrylate block copolymer 146346-92-1,  
 4-Butoxybenzyl triphenyl phosphonium bromide 151626-65-2 156309-05-6,  
 Dimethylsilanediol-ethylene oxide-propylene oxide block copolymer  
 200715-29-3 200960-22-1 201798-70-1 201798-71-2 201816-44-6

RL: TEM (Technical or engineered material use); USES (Uses)  
 (coated papers with hydrophobic barrier layers and image receiving  
 coatings)

IT 7631-86-9, Silica, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (colloidal; coated papers with hydrophobic barrier layers and image  
 receiving coatings)

IT 9010-76-8, Vinylidene chloride/acrylonitrile copolymer  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (hollow composite microspheres; coated papers with hydrophobic barrier  
 layers and image receiving coatings)

IT 9002-88-4, Polyethylene  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (wax; coated papers with hydrophobic barrier layers and image receiving  
 coatings)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L45 ANSWER 39 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1998:42037 CAPLUS

DOCUMENT NUMBER: 128:142130

TITLE: Water-repellent and light-resistant aqueous  
 ink-jet ink compositions

INVENTOR(S): Hayashita, Hideki; Ito, Yuji

PATENT ASSIGNEE(S): Showa Denko K. K., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

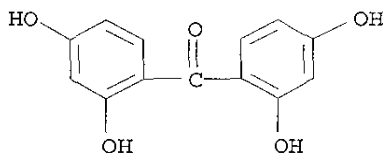
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10007969	A2	19980113	JP 1996-162113	19960621
PRIORITY APPLN. INFO.:			JP 1996-162113	19960621
AB Title compns. contain polar solvent-sol. UV stabilizers and amphiphilic polymers contg. polyorganosiloxane units. An aq. blue ink contg. 2.0% Sumisorb 110s and 2.0% Blemmer PME 400- hexaethyldisiloxane-3-mercaptopropyltrimethoxysilane-Me				

methacrylate-methyltriethoxysilane-phenyltrimethoxysilane-styrene graft copolymer (I) showed color deviation (weatherometer, 70.degree. for 1 h) 5, vs. 15, without the I.

IT 131-55-5, Sumisorb 150 104810-48-2, Tinuvin 1130  
RL: MOA (Modifier or additive use); USES (Uses)  
(amphiphilic polysiloxane-contg. polymer and UV stabilizer-contg. aq. jet inks for light resistance)

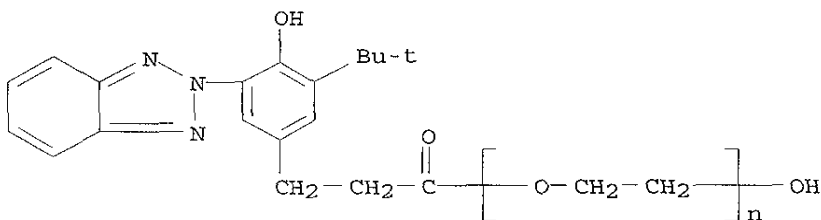
RN 131-55-5 CAPLUS

CN Methanone, bis(2,4-dihydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 104810-48-2 CAPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-[3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropyl]-.omega.-hydroxy- (9CI) (CA INDEX NAME)



IC ICM C09D011-10

ICS C09D011-10

CC 42-12 (Coatings, Inks, and Related Products)

ST light resistance ink amphiphilic acrylic polysiloxane; aq jet printing ink amphiphilic polymer; UV stabilizer amphiphilic polysiloxane aq ink

IT Polysiloxanes, uses

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(acrylic, graft; amphiphilic polysiloxane-contg. polymer and UV stabilizer-contg. aq. jet inks for light resistance)

IT Polythioethers

RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP (Preparation); USES (Uses)

(acrylic, polysiloxanesquioxane-; amphiphilic polysiloxane

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- contg. polymer and UV stabilizer-contg. aq. jet inks  
for light resistance)
- IT Amphiphiles  
UV stabilizers  
(amphiphilic polysiloxane-contg. polymer and UV  
stabilizer-contg. aq. jet inks for light  
resistance)
- IT Inks  
(jet-printing; amphiphilic polysiloxane-contg.  
polymer and UV stabilizer-contg. aq. jet inks for  
light resistance)
- IT Acrylic polymers, uses  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP  
(Preparation); USES (Uses)  
(polysiloxane-, graft; amphiphilic polysiloxane  
-contg. polymer and UV stabilizer-contg. aq. jet inks  
for light resistance)
- IT Acrylic polymers, uses  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP  
(Preparation); USES (Uses)  
(polythioether-, polysilisesquioxane-, amphiphilic polysiloxane  
-contg. polymer and UV stabilizer-contg. aq. jet inks  
for light resistance)
- IT 201812-25-1P 201873-27-0P 201873-28-1P  
RL: IMF (Industrial manufacture); MOA (Modifier or additive use); PREP  
(Preparation); USES (Uses)  
(amphiphilic polysiloxane-contg. polymer and UV  
stabilizer-contg. aq. jet inks for light  
resistance)
- IT 131-55-5, Sumisorb 150 104810-48-2, Tinuvin 1130  
202149-53-9, Sumisorb 110S  
RL: MOA (Modifier or additive use); USES (Uses)  
(amphiphilic polysiloxane-contg. polymer and UV  
stabilizer-contg. aq. jet inks for light  
resistance)

L45 ANSWER 40 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:762288 CAPLUS

DOCUMENT NUMBER: 128:17364

TITLE: Ink-jet printing receptor containing  
silicone oil and ultraviolet absorbent

INVENTOR(S): Omori, Takashi; Ueda, Hiroshi; Kobayashi, Yukio; Ono,  
Atsushi

PATENT ASSIGNEE(S): Jujo Paper Mfg. Co. Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 09309260	A2	19971202	JP 1996-125485	19960521
JP 3146474	B2	20010319		

PRIORITY APPLN. INFO.: JP 1996-125485 19960521

AB The receptor, useful for hydrophilic ink-jet printing, has an ink receiving layer contg. a mixt. of a UV absorbent and a silicone oil. The receptor is manufd. by (1) adding a UV absorbent to a silicone oil and heat kneading to form a uniform mixt., (2) emulsifying the mixt. with an emulsifier to form an O/W emulsion, and (3) applying the emulsion on the receptor and drying. The receptor gives clear images with high resoln. and storage stability.

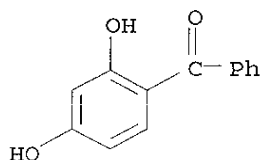
IT 131-56-6, 2,4-Dihydroxybenzophenone 3147-76-0

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(ink-jet printing receptor contg. silicon oil and UV absorbent)

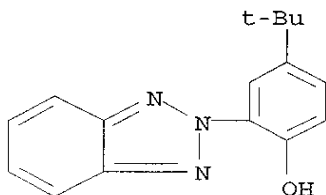
RN 131-56-6 CAPLUS

CN Methanone, (2,4-dihydroxyphenyl)phenyl- (9CI) (CA INDEX NAME)



RN 3147-76-0 CAPLUS

CN Phenol, 2-(2H-benzotriazol-2-yl)-4-(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



IC ICM B41M005-00

ICS B05D005-04; B05D005-06; D21H019-36

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST ink jet printing receptor silicone oil; UV absorbent ink jet printing receptor

IT Polysiloxanes, uses

RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)

(alkoxy; ink-jet printing receptor contg. silicon oil and UV

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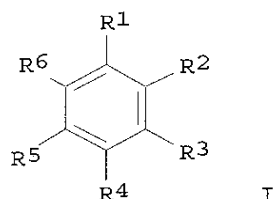
- absorbent)
- IT Polysiloxanes, uses  
RL: DEV (Device component use); MOA (Modifier or additive use); USES  
(Uses)  
(amino-contg.; ink-jet printing receptor contg. silicon oil  
and UV absorbent)
- IT Polysiloxanes, uses  
Polysiloxanes, uses  
RL: DEV (Device component use); MOA (Modifier or additive use); USES  
(Uses)  
(epoxy, alkyl; ink-jet printing receptor contg. silicon oil  
and UV absorbent)
- IT Polysiloxanes, uses  
UV stabilizers  
RL: DEV (Device component use); MOA (Modifier or additive use); USES  
(Uses)  
(ink-jet printing receptor contg. silicon oil and UV  
absorbent)
- IT Epoxy resins, uses  
Epoxy resins, uses  
RL: DEV (Device component use); MOA (Modifier or additive use); USES  
(Uses)  
(polysiloxane-, alkyl; ink-jet printing receptor  
contg. silicon oil and UV absorbent)
- IT Ink-jet printing  
(receptors; ink-jet printing receptor contg. silicon oil and  
UV absorbent)
- IT 131-56-6, 2,4-Dihydroxybenzophenone 3147-76-0  
9016-00-6, Polydimethylsiloxane 29226-39-9, Diphenylsilanediol  
homopolymer 31900-57-9, Dimethylsilanediol homopolymer  
32129-24-1, Polydiphenylsiloxane  
RL: DEV (Device component use); MOA (Modifier or additive use); USES  
(Uses)  
(ink-jet printing receptor contg. silicon oil and UV  
absorbent)

L45 ANSWER 41 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1997:273661 CAPLUS  
DOCUMENT NUMBER: 126:252532  
TITLE: Energy ray-curable printing ink  
compositions for cans and their coating method  
INVENTOR(S): Totsuka, Masatoshi; Takee, Hiroyuki; Iioka, Naoaki;  
Takahashi, Makoto  
PATENT ASSIGNEE(S): Dainippon Ink & Chemicals, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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KOROMA EIC1700

JP 09040899	A2	19970210	JP 1995-190133	19950726
PRIORITY APPLN. INFO.:			JP 1995-190133	19950726
GI				

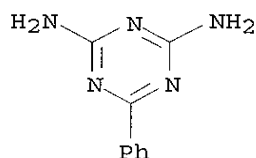


AB The method comprise printing surfaces of cans with title compns. contg. arom. resins prepd. from  $[CH_2:CR_1(CO)kO]_m A[(OCO)lR_2]_n$  ( $R_1 = H, Me$ ;  $R_2 = C_8-20$  aliph. hydrocarbyl;  $A =$  single bond, 2-6 valent org. group;  $k, l = 0, 1$ ;  $m, n = 1-5$ ;  $m + n = 2-6$ ) and benzene derivs. I ( $R_1-6 = H$ , org. group;  $\text{gtoreq.1}$  of  $R_1-6 = CO_2H, OH$ ), curing by active energy ray, coating with overprint varnishes, and curing by active energy ray. Thus, an Al can was printed with an ink comprising Fastogen Blue EP 7S 20, arom. resin (prepd. from dehydrated castor oil fatty acids 400, trimethylolpropane 281, and phthalic anhydride 281 parts) 50, TO 1215 (isostearyl acrylate) 30, and Kayacure DETX-S 3 parts, coated with a varnish, and irradiated by UV to show good ink transfer, misting resistance, pencil hardness 2H, and good appearance.

IT 91-76-9DP, Benzoguanamine, polymers  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (energy ray-curable printing ink compns. contg. arom. resins for cans)

RN 91-76-9 CAPLUS

CN 1,3,5-Triazine-2,4-diamine, 6-phenyl- (9CI) (CA INDEX NAME)



IC ICM C09D011-02

ICS C09D011-02; C09D011-10

CC 42-12 (Coatings, Inks, and Related Products)

ST printing ink arom resin can; energy ray curable ink  
 arom resin

IT Epoxy resins, uses  
 Polyesters, uses

KOROMA EIC1700

Polyurethanes, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(acrylates; energy ray-curable printing ink compns.  
contg. arom. resins for cans)

IT Alkyd resins  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(acrylic; energy ray-curable printing ink compns.  
contg. arom. resins for cans)

IT Polysiloxanes, uses  
Polysiloxanes, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(alkyd-; energy ray-curable printing ink compns.  
contg. arom. resins for cans)

IT Castor oil  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(dehydrated, alkyd resin derivs.; energy ray-curable printing ink compns. contg. arom. resins for cans)

IT Acrylic polymers, uses  
Epoxy resins, uses  
Polyamines  
Polyesters, uses  
Polyketones  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(energy ray-curable printing ink compns. contg.  
arom. resins for cans)

IT Polyesters, uses  
Polyesters, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(epoxy; energy ray-curable printing ink compns.  
contg. arom. resins for cans)

IT Alkyd resins  
Phenolic resins, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(modified; energy ray-curable printing ink compns.  
contg. arom. resins for cans)

IT Epoxy resins, uses  
Epoxy resins, uses  
Polyurethanes, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyester-; energy ray-curable printing ink compns  
. contg. arom. resins for cans)

IT Fatty acids, uses  
Rosin  
RL: TEM (Technical or engineered material use); USES (Uses)

(polymers modified with; energy ray-curable printing ink compns. contg. arom. resins for cans)

IT Alkyd resins  
Alkyd resins  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polysiloxane-; energy ray-curable printing ink compns. contg. arom. resins for cans)

IT Inks  
(printing, radiation-curable; energy ray-curable printing ink compns. contg. arom. resins for cans)

IT 91-76-9DP, Benzoguanamine, polymers 110-16-7DP, 2-Butenedioic acid (Z)-, polymers, reaction products with rosin 131-17-9DP, Diallyl phthalate, polymers 502-44-3DP, 2-Oxepanone, derivs. polymers 30525-36-1DP, Phthalic anhydride-trimethylolpropane copolymer, esters with dehydrated castor oil 36087-94-2DP, Isophthalic acid-trimethylolpropane copolymer, esters with dehydrated castor oil  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(energy ray-curable printing ink compns. contg. arom. resins for cans)

L45 ANSWER 42 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1997:21129 CAPLUS  
DOCUMENT NUMBER: 126:52886  
TITLE: Thermal recording body  
INVENTOR(S): Mifuji, Hisayoshi  
PATENT ASSIGNEE(S): Shinoji Seishi Kk, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08258422	A2	19961008	JP 1995-62912	19950322
JP 3094831	B2	20001003		

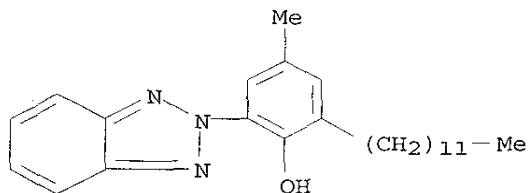
PRIORITY APPLN. INFO.: JP 1995-62912 19950322

AB The body comprises, from the bottom, (A) a support, (B) a heat-sensitive recording layer contg. a color-forming agent and a color developer, and (C) a protective layer contg. an aq. resin, an UV-absorbing agent-encapsulated color-unformable microcapsule, and a modified silicone oil. The obtained images are chem.- and light resistant and capable of stamping aq. inks, and show high luster.

IT 23328-53-2, 2-(2-Hydroxy-3-dodecyl-5-methylphenyl)benzotriazole  
RL: DEV (Device component use); USES (Uses)  
(UV absorber in protective layer; thermal recording body having modified silicone oil protective layer)

KOROMA EIC1700

RN 23328-53-2 CAPLUS  
 CN Phenol, 2-(2H-benzotriazol-2-yl)-6-dodecyl-4-methyl- (9CI) (CA INDEX  
 NAME)



IC ICM B41M005-26  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other  
 Reprographic Processes)  
 Section cross-reference(s): 38  
 ST thermal recording material protective silicone coating; printing thermal  
 material protective silicone coating  
 IT Polysiloxanes, uses  
 RL: DEV (Device component use); USES (Uses)  
 (amino, Polon MF 14D; thermal recording body having modified silicone  
 oil protective layer)  
 IT Polysiloxanes, uses  
 Polysiloxanes, uses  
 RL: DEV (Device component use); USES (Uses)  
 (epoxy, Polon MF 11B; thermal recording body having modified silicone  
 oil protective layer)  
 IT Epoxy resins, uses  
 Epoxy resins, uses  
 RL: DEV (Device component use); USES (Uses)  
 (polysiloxane-, Polon MF 11B; thermal recording body having  
 modified silicone oil protective layer)  
 IT Polyurethanes, preparation  
 Polyurethanes, preparation  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (polyurea-, aminoplasts; microcapsule; thermal recording body having  
 modified silicone oil protective layer)  
 IT Aminoplasts  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (polyureas-polyurethane; microcapsule; thermal recording body having  
 modified silicone oil protective layer)  
 IT Polyureas  
 Polyureas  
 RL: PNU (Preparation, unclassified); TEM (Technical or engineered material  
 use); PREP (Preparation); USES (Uses)  
 (polyurethane-, aminoplasts; microcapsule; thermal recording body having  
 modified silicone oil protective layer)  
 IT Thermal printing

(thermal recording body having modified silicone oil protective layer)  
 IT 23328-53-2, 2-(2-Hydroxy-3-dodecyl-5-methylphenyl)benzotriazole  
 RL: DEV (Device component use); USES (Uses)  
 (UV absorber in protective layer; thermal recording body having  
 modified silicone oil protective layer)  
 IT 9002-89-5P, PVA 117 184851-58-9P, Glyoxal-Gohsefimer Z-210-hexamethylene  
 diisocyanate isocyanurate copolymer 184972-10-9P  
 RL: DEV (Device component use); PNU (Preparation, unclassified); PREP  
 (Preparation); USES (Uses)  
 (microcapsule; thermal recording body having modified silicone oil  
 protective layer)

L45 ANSWER 43 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1996:724029 CAPLUS  
 DOCUMENT NUMBER: 125:331802  
 TITLE: Stain- and impact-resistant coating  
 compositions for metal plates  
 INVENTOR(S): Tanaka, Shoichi; Nakano, Takashi  
 PATENT ASSIGNEE(S): Kansai Paint Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08245905	A2	19960924	JP 1995-49456	19950309
US 5681890	A	19971028	US 1996-611189	19960305
PRIORITY APPLN. INFO.:			JP 1995-49456	19950309
			JP 1995-49478	19950309

AB Title compns. comprise (A) 100 parts compns. comprising 30-90 parts  
 OH-contg. polyesters [no.-av. mol. wt. (Mn) 1000-35,000, glass temp. (Tg)  
 -10 to +80.degree., OH value 3-160 mg KOH/g] and 10-70 parts 95/5-25/75  
 blends of methylolated melamine resins and butylolated melamine resins as  
 crosslinkers, (B) 0.2-3.0 parts sulfonic acid amine salts as curing  
 catalysts, and (D) 1-20 parts X1SiMe2O(SiMe2O)m(SiMeX2O)nSiMe2X3 (X1-3 =  
 Me, Cl-8 org. groups contg. .gtoreq.1 group selected from OH, CO2H, epoxy,  
 and SH, which are not Me at the same time; m = 10-300; n = 0-290, m + n =  
 10-300). Thus, a Zn3(PO4)2-treated galvanized steel plate was undercoated  
 with KP 8620 and topcoated with a compn. comprising Vylon KS 1640V (Mn  
 1100, Tg 20.degree., OH value 10 mg KOH/g) 80, Cymel 303 15,  
 Super-Beckamine 5, X 22-162C 3, p-toluenesulfonic acid Bu2NH salt 0.8, and  
 Ti white 90 parts to show pencil hardness H, and good impact resistance  
 and oily ink releasability.  
 IT 183805-49-4P  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or  
 engineered material use); PREP (Preparation); USES (Uses)  
 (stain- and impact-resistant melamine resin-polyester-  
 siloxane coatings for metal plate)  
 RN 183805-49-4 CAPLUS

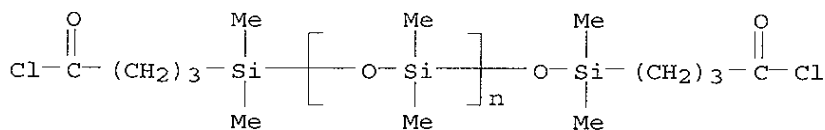
CN 1,4-Benzenedicarboxylic acid, polymer with .alpha.-[(4-chloro-4-oxobutyl)dimethylsilyl]-.omega.-[[ (4-chloro-4-oxobutyl)dimethylsilyl]oxy]poly[oxy(dimethylsilylene)], 1,2-ethanediol, formaldehyde and 1,3,5-triazine-2,4,6-triamine (9CI) (CA INDEX NAME)

CM 1

CRN 155886-23-0

CMF (C2 H6 O Si)<sub>n</sub> C12 H24 Cl2 O3 Si2

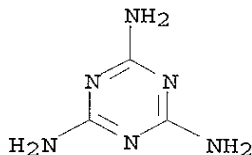
CCI PMS



CM 2

CRN 108-78-1

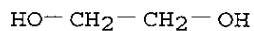
CMF C3 H6 N6



CM 3

CRN 107-21-1

CMF C2 H6 O2



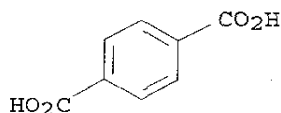
CM 4

CRN 100-21-0

CMF C8 H6 O4

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CM 5

CRN 50-00-0

CMF C H2 O

H<sub>2</sub>C=O

- IC ICM C09D005-14
- ICS B05D005-00; B05D007-14; C09D161-32; C09D167-02; C09D183-04
- CC 42-10 (Coatings, Inks, and Related Products)
- ST polyester melamine **siloxane** coating impact resistance; sulfonic acid amine salt curing catalyst; **stain** resistance polyester melamine **siloxane** coating
- IT Coating materials
- Crosslinking catalysts
  - (**stain**- and impact-resistant melamine resin-polyester-**siloxane** coatings for metal plate)
- IT Galvanized iron and steel
- RL: MSC (Miscellaneous)
  - (**stain**- and impact-resistant melamine resin-polyester-**siloxane** coatings for metal plate)
- IT Polyesters, uses
- RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
  - (aminoplast-, **siloxanes**; **stain**- and impact-resistant melamine resin-polyester-**siloxane** coatings for metal plate)
- IT **Siloxanes** and Silicones, uses
- RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
  - (carboxy-contg., **polymers** with polyesters and melamine resin; **stain**- and impact-resistant melamine resin-polyester-**siloxane** coatings for metal plate)
- IT **Siloxanes** and Silicones, uses
- RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
  - (di-Me, (glycidylloxy)propyl group-terminated, **polymers** with polyesters and melamine resin; **stain**- and impact-resistant melamine resin-polyester-**siloxane** coatings for metal plate)
- IT **Siloxanes** and Silicones, uses
- RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

KOROMA EIC1700

(di-Me, mono(hydroxyalkyl) group-terminated, **polymers** with polyesters and melamine resin; **stain-** and impact-resistant melamine resin-polyester-**siloxane** coatings for metal plate)

IT Aminoplasts  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polyester-, **siloxanes**; **stain-** and impact-resistant melamine resin-polyester-**siloxane** coatings for metal plate)

IT 13047-57-9, Dibutylamine p-Toluenesulfonate 27176-87-0D, Dodecylbenzenesulfonic acid, dimethyloxazolidine salts  
 RL: CAT (Catalyst use); USES (Uses)  
 (**stain-** and impact-resistant melamine resin-polyester-**siloxane** coatings for metal plate)

IT 9003-08-1DP, Cymel 303, **polymers** with polyesters and **siloxanes** 137700-29-9DP, Vylon GK 250, **polymers** with melamine resin and **siloxanes** 147626-76-4DP, Vylon KS 1640V, **polymers** with melamine resin and **siloxanes**  
 183805-38-1P 183805-44-9P **183805-49-4P** 183805-54-1P  
 183805-58-5P 183805-62-1DP, coconut oil esters, **polymers** with melamine resins and **siloxanes**  
 RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (**stain-** and impact-resistant melamine resin-polyester-**siloxane** coatings for metal plate)

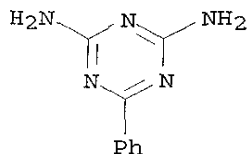
L45 ANSWER 44 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1996:38616 CAPLUS  
 DOCUMENT NUMBER: 124:71668  
 TITLE: Thermal transfer sheet with excellent antiblocking characteristics  
 INVENTOR(S): Suzuki, Taro; Hirano, Toshifusa  
 PATENT ASSIGNEE(S): Dainippon Printing Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07257057	A2	19951009	JP 1994-73811	19940322
PRIORITY APPLN. INFO.:			JP 1994-73811	19940322
AB The title sheet comprises a support, a heat-fusible ink layer, and a surface layer comprised of no colorant, heat-adhesive resin, parting resin, and microparticles.				
IT 26160-89-4, Epostar S RL: DEV (Device component use); USES (Uses) (thermal transfer sheet surface layer comprising)				
RN 26160-89-4 CAPLUS				
CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA INDEX NAME)				

CM 1

CRN 91-76-9

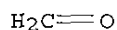
CMF C9 H9 N5



CM 2

CRN 50-00-0

CMF C H2 O



IC ICM B41M005-40

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST thermal transfer sheet antiblocking

IT Polyureas

RL: DEV (Device component use); USES (Uses)  
(thermal transfer sheet surface layer comprising)

IT Siloxanes and Silicones, uses

RL: DEV (Device component use); USES (Uses)  
(acrylate-, thermal transfer sheet surface layer comprising)

IT Printing, nonimpact

(thermal-transfer, sheets, thermal transfer sheet with excellent antiblocking characteristics)

IT 24937-78-8, Ethylene-vinyl acetate copolymer 26160-89-4

, Epostar S 113496-56-3, LBT 1830

RL: DEV (Device component use); USES (Uses)  
(thermal transfer sheet surface layer comprising)

L45 ANSWER 45 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:650403 CAPLUS

DOCUMENT NUMBER: 123:44460

TITLE: Thermal transfer recording media with antisticking layer

INVENTOR(S): Akamatsu, Yoshimoto; Kusuha, Shigeki

PATENT ASSIGNEE(S): Fuji Kagaku Shikogyo, Japan

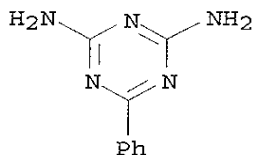
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

KOROMA EIC1700

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	JP 07068957	A2	19950314	JP 1993-219912	19930903
PRIORITY APPLN. INFO.:				JP 1993-219912	19930903
AB	The title recording media comprise a substrate with coatings of a thermal transfer layer on 1 side and an antisticking layer contg. a reactant obtained by crosslinking .gtoreq.2 resins selected from <b>siloxane</b> , melamine, and benzoguanamine resins in the presence of an acid catalyst and a silicone oil on the other side. The media prevent melt adhesion of the substrate upon high speed printing and show good slipperiness upon heating. Thus, a PET support was coated with a compn. contg. hydrolyzable alkoxy-contg. <b>polysiloxane</b> resin, high alc.-modified melamine resin, higher alc.-modified benzoguanamine resin, <b>polysiloxane</b> having ester and ether bonds, and maleic acid on the back side, heat-dried, and coated with a heat-meltable ink layer on the front side to give a thermal transfer sheet.				
IT	91-76-9D, Benzoguanamine, derivs., resins RL: DEV (Device component use); USES (Uses) (thermal-transfer recording material with antisticking backcoat layer)				
RN	91-76-9 CAPLUS				
CN	1,3,5-Triazine-2,4-diamine, 6-phenyl- (9CI) (CA INDEX NAME)				



IC ICM B41M005-40  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 ST antisticking layer thermal transfer medium; melamine resin thermal transfer medium; benzoguanamine resin thermal transfer medium; silicone thermal transfer medium  
 IT **Siloxanes** and Silicones, uses  
 RL: DEV (Device component use); USES (Uses)  
 (crosslinked with aminoplasts; thermal-transfer recording material with antisticking backcoat layer)  
 IT Aminoplasts  
 RL: DEV (Device component use); USES (Uses)  
 (crosslinked with **siloxane**; thermal-transfer recording material with antisticking backcoat layer)  
 IT Printing, nonimpact  
 (thermal-transfer, thermal-transfer recording material with

antisticking backcoat layer)  
 IT 91-76-9D, Benzoguanamine, derivs., resins 110-16-7D, Maleic acid, polymers 9003-08-1D, Formaldehyde-melamine copolymer, copolymer with siloxane and benzoguanamine resin  
 RL: DEV (Device component use); USES (Uses)  
 (thermal-transfer recording material with antisticking backcoat layer)

L45 ANSWER 46 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1995:526572 CAPLUS  
 DOCUMENT NUMBER: 122:268153  
 TITLE: Preparation and use of liquid crystalline pigments whose reflected color depends on the observation angle  
 INVENTOR(S): Mueller-Rees, Christoph; Maurer, Robert; Stohrer, Juergen; Csellich, Franz; Jung, Silvia; Kreuzer, Franz Heinrich  
 PATENT ASSIGNEE(S): Consortium fuer Elektrochemische Industrie GmbH, Germany  
 SOURCE: Ger. Offen., 7 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4240743	A1	19940609	DE 1992-4240743	19921203
US 5362315	A	19941108	US 1993-155353	19931122
CA 2110099	AA	19940604	CA 1993-2110099	19931126
CA 2110099	C	19970204		
JP 06220350	A2	19940809	JP 1993-302021	19931201
JP 2519018	B2	19960731		
EP 601483	A1	19940615	EP 1993-119438	19931202
EP 601483	B1	19950927		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 128481	E	19951015	AT 1993-119438	19931202
ES 2077462	T3	19951116	ES 1993-119438	19931202
PRIORITY APPLN. INFO.:			DE 1992-4240743	19921203

AB The title pigments, useful for coloration of inks, lacquers, plastics, fibers, cosmetic prepns., and esp. for security coding, comprise interference layers made of tridimensional oriented crosslinked cholesteric liq. cryst. structures with chiral phases, specifically organosiloxanes contg. .gtoreq.2 polymerizable groups, and optionally other dyes and pigments that are not carriers for the above layers. The light reflected from the pigments is circularly polarized. Thus, a soln. of cholesteryl 4-(2-propenyloxy)benzoate 233, [(trimethylsilyl)oxy]phenyl 4-(2-propenyloxy)benzoate 178, and tetramethylcyclotetrasiloxane 56.9 g in 400 mL PhMe was refluxed for 1 h with 24 mg bis(cyclopentadienyl)platinum dichloride the mixt. was treated with a

soln. of 1.2 g NaOH in 50 mL EtOH and the reflux continued for 7 h to cleave the silyl ether. The vol. of the mixt. was reduced to 1/3 by evapn. in vacuo, 7.5 g p-MeC<sub>6</sub>H<sub>4</sub>SO<sub>3</sub>H and 154 g methacrylic acid anhydride were added and the whole heated for 1 h at 100.degree. to give a **polymer** having glass temp. 14.degree. and clearing point 141.degree.. This (4 g) was mixed with 0.11 g Irgacure 907 at 70.degree. and the resulting reddish liq. coated (15 .mu.m) at 120.degree. on a PET polyester film using a doctor blade, with the simultaneous orientation of the liq. cryst. material. The coating was UV-cured (80 W/cm, 5 s) to give a brittle film that was sepd. from the substrate and comminuted to give a title pigment.

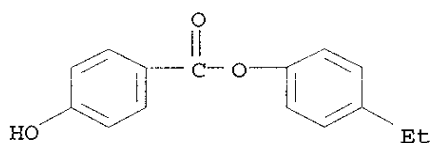
IT 65664-74-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and esterification with methacrylic anhydride; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)

RN 65664-74-6 CAPLUS

CN Benzoic acid, 4-hydroxy-, 4-ethylphenyl ester (9CI) (CA INDEX NAME)



IC ICM C09K019-02

ICS C09K019-38; C09K019-36; C09D017-00; C09D011-02; C09D005-22; C09D005-32; C08J003-20

ICA C09K019-50; C09D161-06; C09D161-20; C09D167-00; C09D131-04; C09D163-00; C09D175-04; C09D123-06; C09D115-02; C09D123-28; C09D161-02; C09D133-04

CC 41-8 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

Section cross-reference(s): 37, 42, 75

ST pigment **polysiloxane** prepn liq cryst; **coloration**

change liq cryst pigment prepn; cholesteryl propenyloxybenzoate

**siloxane copolymer** pigment prepn

IT Carbon black, uses

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(blends with cholesteric liq. crystal-contg. **siloxane** pigments; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)

IT Fibrous materials

(**coloration** with cholesteric liq. crystal-contg. **siloxane** pigments; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)

IT Plastics

RL: MSC (Miscellaneous)

(**coloration** with cholesteric liq. crystal-contg.

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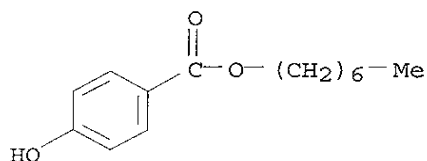
- siloxane pigments; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)
- IT Pigments  
(liq.-cryst. siloxane-based; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)
- IT Liquid crystals, polymeric  
(siloxanes; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)
- IT Coating materials  
(lacquers, coloration with cholesteric liq. crystal-contg. siloxane pigments; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)
- IT Inks  
(printing, coloration with cholesteric liq. crystal-contg. siloxane pigments; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)
- IT Siloxanes and Silicones, preparation  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(reaction products, with cholesteryl propenyloxybenzoate and analogs, methacrylate esters, crosslinked polymers; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)
- IT 71868-10-5, Irgacure 907  
RL: CAT (Catalyst use); USES (Uses)  
(UV photocrosslinking catalyst; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)
- IT 9002-86-2, Poly(vinyl chloride)  
RL: MSC (Miscellaneous)  
(coloration with cholesteric liq. crystal-contg. siloxane pigments; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)
- IT 760-93-0, Methacrylic anhydride  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(esterification with ethylphenyl hydroxybenzoate; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)
- IT 65664-74-6P  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and esterification with methacrylic anhydride; prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)
- IT 162779-86-4P 162779-87-5P 162779-89-7P 162779-91-1P  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(prepn. and use of liq. cryst. pigments whose reflected color depends on the observation angle)
- IT 162779-88-6  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(trimethylsilyl ether cleavage; prepn. and use of liq. cryst. pigments

whose reflected color depends on the observation angle)

L45 ANSWER 47 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:401210 CAPLUS  
DOCUMENT NUMBER: 122:163763  
TITLE: Magnetic inks  
INVENTOR(S): Yanai, Masahiro  
PATENT ASSIGNEE(S): Ricoh Kk, Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06271796	A2	19940927	JP 1993-87947	19930323
PRIORITY APPLN. INFO.:			JP 1993-87947	19930323
AB Magnetic inks contain at least magnetic substances, pigments, and vehicles; the magnetic substances are obtained by heat treatment of phthalocyanine compds. at 200-900.degree.. A hot-melt magnetic ink contained 3.5 parts phthalocyanine blue, 92.5 parts n-heptyl-p-hydroxybenzoate, and 4.0 parts of a magnetic substance obtained by treating 2,3,9,10,16,17,23,24-octacyanophthalocyanine at 500.degree..				
IT 1085-12-7, n-Heptyl-p-hydroxybenzoate				
RL: TEM (Technical or engineered material use); USES (Uses) (magnetic inks)				
RN 1085-12-7 CAPLUS				
CN Benzoic acid, 4-hydroxy-, heptyl ester (9CI) (CA INDEX NAME)				



IC ICM C09D011-00  
ICS C09D011-00  
CC 42-12 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 77  
ST ink magnetic phthalocyanine  
IT Candelilla wax  
Siloxanes and Silicones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(magnetic inks)  
IT Inks  
(hot-melt, prepn. of octaphthalocyanine for magnetic inks)  
IT Lubricating oils



(machine, magnetic inks)

IT Inks  
(magnetic, magnetic inks)

IT Inks  
(solvent-based, prepn. of octaphthalocyanine for magnetic inks  
)

IT Fatty acids, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(soya, magnetic inks)

IT Inks  
(water-thinned, prepn. of octaphthalocyanine for magnetic inks  
)

IT 76221-26-6P, 2,3,9,10,16,17,23,24-Octacyanophthalocyanine  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)  
(magnetic inks)

IT 147-14-8, Phthalocyanine blue 1085-12-7, n-Heptyl-p-  
hydroxybenzoate 1330-20-7D, Xylene, polymers 2092-56-0, Lake  
Red C 13007-86-8, Aniline Black  
RL: TEM (Technical or engineered material use); USES (Uses)  
(magnetic inks)

IT 712-74-3, 1,2,4,5-Tetracyanobenzene  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of octaphthalocyanine for magnetic inks)

IT 9002-88-4, Polyethylene  
RL: TEM (Technical or engineered material use); USES (Uses)  
(wax; magnetic inks)

L45 ANSWER 48 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:268283 CAPLUS

DOCUMENT NUMBER: 123:21950

TITLE: Method for enhancing image-density

AUTHOR(S): Anon.

CORPORATE SOURCE: UK

SOURCE: Research Disclosure (1994), 367, 651-4  
CODEN: RSDSBB; ISSN: 0374-4353

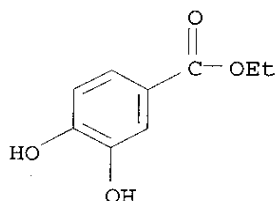
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The present disclosure provides a method for enhancing image d. in a  
substantially light-insensitive thermog. recording material or  
photothermog. recording material. This can be accomplished in three  
different ways. The first example is a direct thermal recording material  
with a thermosensitive recording layer contg. silver behenate,  
polyvinylbutyral, and reducing agents. A thermal printhead was used to  
print test patterns on this thermosensitive recording material. After  
printing, the recording material was exposed to IR radiation as  
post-treatment. Selective enhancement of the originally formed optical d.  
by the IR post-exposure was obsd. The IR post-exposure makes it possible  
to reduce the writing energy necessary for obtaining certain optical d.  
The second example is a photothermog. compn. contg. silver halide  
emulsion, silver behenate, polyvinylbutyral, reducing agent, stabilizer,  
and a spectral sensitizer. After imagewise exposure, this light

sensitive recording material was thermally developed and then post-treated with IR exposure. IR post-treatment enhanced the max. optical d. obtained. The third example is a thermog. recording material contg. silver behenate, polyvinylbutyral, reducing agent, and an IR absorbing dye. This material can be applied either to an electrophotog. receptor or to a receptor layer of ink-jet printing.

- IT 3943-89-3, 3,4-Dihydroxybenzoic acid ethyl ester  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (reducing agent; IR post-exposure for enhancing image d. in thermog. recording)  
 RN 3943-89-3 CAPLUS  
 CN Benzoic acid, 3,4-dihydroxy-, ethyl ester (9CI) (CA INDEX NAME)



- CC 74-7 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 ST image density thermog recording IR exposure  
 IT Electrophotography  
 Printing, nonimpact  
 Recording  
 Recording materials  
 Thermographic copying  
 (IR post-exposure for enhancing image d. in thermog. recording)  
 IT Siloxanes and Silicones, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (IR post-exposure for enhancing image d. in thermog. recording)  
 IT Vinyl acetal polymers  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (butyrals, IR post-exposure for enhancing image d. in thermog. recording)  
 IT Photographic sensitizers  
 (spectral, IR post-exposure for enhancing image d. in thermog. recording)  
 IT Imaging  
 (thermog., IR post-exposure for enhancing image d. in thermog. recording)  
 IT 164008-21-3  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (IR absorbing dye; IR post-exposure for enhancing image d. in thermog. recording)  
 IT 57-10-3, Hexadecanoic acid, uses 408-35-5, Sodium palmitate 2489-05-6, Silver behenate

RL: TEM (Technical or engineered material use); USES (Uses)  
 (IR post-exposure for enhancing image d. in thermog. recording)

IT 77-08-7 3943-89-3, 3,4-Dihydroxybenzoic acid ethyl ester  
 59149-19-8, Benzenesulfonamide, N-(3-hydroxyphenyl)-  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (reducing agent; IR post-exposure for enhancing image d. in thermog. recording)

IT 17025-47-7, Tribromomethyl phenyl sulfone 63450-48-6  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (spectral sensitizer; IR post-exposure for enhancing image d. in thermog. recording)

IT 25038-59-9, Polyethylene terephthalate, uses  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (support layer; IR post-exposure for enhancing image d. in thermog. recording)

IT 2037-95-8, 1,3-Benzoxazine-2,4-dione  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (tone modifier; IR post-exposure for enhancing image d. in thermog. recording)

L45 ANSWER 49 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1995:252413 CAPLUS  
 DOCUMENT NUMBER: 122:58430  
 TITLE: Thermal-transfer media  
 INVENTOR(S): Tateishi, Tomoyoshi; Aono, Toshiaki  
 PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06143846	A2	19940524	JP 1992-294614	19921102
PRIORITY APPLN. INFO.:			JP 1992-294614	19921102

AB Title media comprise (A) donor sheets contg. hot-melt ink layers contg. non-compatible resins as binders to prevent ink migration and (B) receptor sheets contg. .gtoreq.1 layer having (in)org. particles to prevent slippage. An A with a hot-melt ink contg. Vylon 280 (polyester) and Denka butyral 5000A and a B with a ink-receiving layer contg. KF 857 (silicone oil) and Flo-Beads CL 2080 were prepd.

IT 26160-89-4, Epostar L 15  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (Epostar L 15; non-compatible polymer binder-contg. ink donors with (in)org. particle-contg. ink receptors)

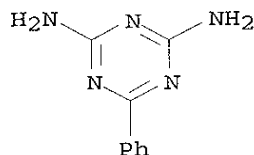
RN 26160-89-4 CAPLUS

CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA INDEX NAME)

CM 1

CRN 91-76-9

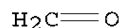
CMF C9 H9 N5



CM 2

CRN 50-00-0

CMF C H2 O



IC ICM B41M005-40

CC 42-12 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

ST migration prevention transfer ink noncompatible polymer  
; slippage prevention org particle ink receptor

IT Polycarbonates, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(non-compatible polymer binder-contg. ink donors  
with (in)org. particle-contg. ink receptors)

IT Siloxanes and Silicones, uses

RL: MOA (Modifier or additive use); USES (Uses)  
(amino, KF 857; non-compatible polymer binder-contg.  
ink donors with (in)org. particle-contg. ink  
receptors)

IT Vinyl acetal polymers

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
(butyrals, Denka Butyral; non-compatible polymer  
binder-contg. ink donors with (in)org. particle-contg.  
ink receptors)

IT Inks

(printing, thermal-transfer, non-compatible polymer  
binder-contg. ink donors with (in)org. particle-contg.  
ink receptors)

IT Printing, nonimpact

(thermal-transfer, non-compatible polymer binder-contg.  
ink donors with (in)org. particle-contg. ink)

KOROMA EIC1700

- receptors)
- IT 139351-84-1, Epostar GP 90  
RL: MOA (Modifier or additive use); USES (Uses)  
(Epostar GP 90; non-compatible **polymer** binder-contg.  
**ink** donors with (in)org. particle-contg. **ink**  
receptors)
- IT 26160-89-4, Epostar L 15  
RL: MOA (Modifier or additive use); USES (Uses)  
(Epostar L 15; non-compatible **polymer** binder-contg.  
**ink** donors with (in)org. particle-contg. **ink**  
receptors)
- IT 126602-25-3, Fine Pearl PB 3000  
RL: MOA (Modifier or additive use); USES (Uses)  
(Fine Pearl PB 3000; non-compatible **polymer** binder-contg.  
**ink** donors with (in)org. particle-contg. **ink**  
receptors)
- IT 9003-53-6, Fine Pearl PB 3003  
RL: MOA (Modifier or additive use); USES (Uses)  
(Fine Pearl PB 3003; non-compatible **polymer** binder-contg.  
**ink** donors with (in)org. particle-contg. **ink**  
receptors)
- IT 9002-88-4, Flo-Beads CL 2080  
RL: MOA (Modifier or additive use); USES (Uses)  
(Flo-Beads CL 2080; non-compatible **polymer** binder-contg.  
**ink** donors with (in)org. particle-contg. **ink**  
receptors)
- IT 156680-97-6, MR 13G  
RL: MOA (Modifier or additive use); USES (Uses)  
(MR 13G; non-compatible **polymer** binder-contg. **ink**  
donors with (in)org. particle-contg. **ink** receptors)
- IT 9011-14-7, MR 7G  
RL: MOA (Modifier or additive use); USES (Uses)  
(MR 7G; non-compatible **polymer** binder-contg. **ink**  
donors with (in)org. particle-contg. **ink** receptors)
- IT 25038-59-9, Vylon 280, uses  
RL: POF (Polymer in formulation); TEM (Technical or engineered material  
use); USES (Uses)  
(Vylon 280; non-compatible **polymer** binder-contg. **ink**  
donors with (in)org. particle-contg. **ink** receptors)
- IT 9011-14-7, MR 20G  
RL: MOA (Modifier or additive use); USES (Uses)  
(non-compatible **polymer** binder-contg. **ink** donors  
with (in)org. particle-contg. **ink** receptors)
- IT 9002-86-2, PVC 25038-54-4, Caprolactam **homopolymer**, uses  
RL: POF (Polymer in formulation); TEM (Technical or engineered material  
use); USES (Uses)  
(non-compatible **polymer** binder-contg. **ink** donors  
with (in)org. particle-contg. **ink** receptors)

L45 ANSWER 50 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1995:193373 CAPLUS  
DOCUMENT NUMBER: 122:119063

TITLE: Thermal transfer recording media with heat-resistant protective layer  
 INVENTOR(S): Harada, Naryuki; Taniguchi, Keiji; Iwaki, Yoichi; Sakai, Yutaka; Teranishi, Shigekazu; Kawakami, Susumu; Hata, Hironori  
 PATENT ASSIGNEE(S): Ricoh Kk, Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06206388	A2	19940726	JP 1992-356644	19921222
JP 3398769	B2	20030421		

PRIORITY APPLN. INFO.: JP 1992-356644 19921222

AB In the title media comprising a support with coatings of a thermal transfer ink layer on the front side and a heat-resistant protective layer on the back side, the protective layer is made of an aq. coating compn. comprising (1) an aq. graft copolymer, which is prepd. from a radically polymerizable silicone macromonomer, a vinyl monomer having phosphoric acid group in its mol., and other vinyl monomer copolymerizable with these monomers and is alkali-neutralized to be water-dilutable, and (2) a glycidyl ether having .gtoreq.2 epoxy groups in its mol. and/or (3) a water-dilutable melamine resin. The media show good antisticking and antiblocking properties and are adaptable to high speed printers. Thus, Me methacrylate, .beta.-hydroxyethyl methacrylate, Phosmer M (acid phosphoxyethyl methacrylate), and AK-30 (silicone macromonomer) were reacted and neutralized with dimethylethanolamine to give an aq. graft copolymer. A mixt. of the graft copolymer and Denacol EX-614B (sorbitol polyglycidyl ether) was coated on 1 side of a PET film, and a thermal transfer ink layer was coated on the other side to give a thermal transfer sheet.

IT 160585-14-8

RL: DEV (Device component use); USES (Uses)  
 (thermal-transfer recording material with heat-resistant backcoat layer)

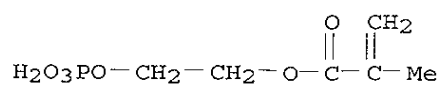
RN 160585-14-8 CAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, polymer with dimethylsilanediol, ethenylbenzene, formaldehyde, 2-(phosphonooxy)ethyl 2-methyl-2-propenoate and 1,3,5-triazine-2,4,6-triamine, graft (9CI) (CA INDEX NAME)

CM 1

CRN 24599-21-1

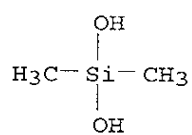
CMF C6 H11 O6 P



CM 2

CRN 1066-42-8

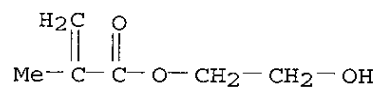
CMF C2 H8 O2 Si



CM 3

CRN 868-77-9

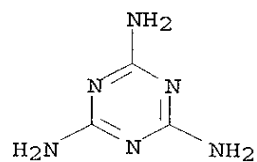
CMF C6 H10 O3



CM 4

CRN 108-78-1

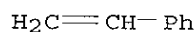
CMF C3 H6 N6



CM 5

CRN 100-42-5

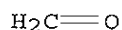
CMF C8 H8



CM 6

CRN 50-00-0

CMF C H2 O



IC ICM B41M005-40

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST heat resistant layer thermal transfer; silicone macromonomer thermal transfer medium; glycidyl ether thermal transfer medium; melamine resin thermal transfer medium

IT Aminoplasts

Epoxy resins, uses

RL: DEV (Device component use); USES (Uses)

(thermal-transfer recording material with heat-resistant backcoat layer)

IT Printing, nonimpact

(thermal-transfer, thermal-transfer recording material with heat-resistant backcoat layer)

IT 80-62-6D, graft copolymer with vinyl monomers and siloxane and glycidyl ether or melamine 868-77-9D, graft copolymer with vinyl monomers and siloxane and glycidyl ether or melamine 9003-08-1D, Cymel 300, graft copolymer with vinyl monomers and siloxane 24599-21-1D, graft copolymer with vinyl monomers and siloxane and glycidyl ether or melamine 71228-86-9D, Denacol EX 614B, graft copolymer with vinyl monomers and siloxane 160585-13-7, Dimethylsilanediol-.beta.-hydroxyethyl methacrylate-Phosmer M-styrene graft copolymer salt with dimethylethanolamine 160585-14-8 160792-32-5 160792-34-7

RL: DEV (Device component use); USES (Uses)

(thermal-transfer recording material with heat-resistant backcoat layer)

L45 ANSWER 51 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1994:137371 CAPLUS

DOCUMENT NUMBER: 120:137371

TITLE: Thermal transfer printing inks and receptors

INVENTOR(S): Koita, Tomoyoshi; Aono, Toshiaki

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

KOROMA EIC1700



LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05262055	A2	19931012	JP 1992-92427	19920319
PRIORITY APPLN. INFO.:			JP 1992-92427	19920319

AB Ink layers and/or receptor layers contain release agents and inorg. or org. fine granular matte agents which decrease slip between the ink and receptor layers during transfer printing. Thus, yellow, magenta, and cyan inks contain dyes 3, Epostar MS (2 .mu.m) 0.05, and Denka Butyral 5000 A 3 g and KF-96 0.004, solvents 100, and Takenate D 110N 0.05 mL.

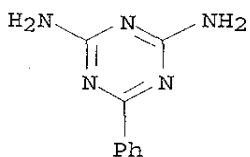
IT 26160-89-4  
 RL: USES (Uses)  
 (matte agents, thermal transfer printing inks contg.)

RN 26160-89-4 CAPLUS

CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA INDEX NAME)

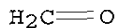
CM 1

CRN 91-76-9  
 CMF C9 H9 N5



CM 2

CRN 50-00-0  
 CMF C H2 O



RL: USES (Uses)  
 (matte agents, thermal transfer printing receptors contg.)

IC ICM B41M005-30  
 ICS B41M005-40

CC 42-12 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 74

ST matte agent thermal transfer printing; release agent thermal transfer

KOROMA BIC1700

printing; silicone release agent **ink**; benzoguanamine resin matte agent

IT Friction materials  
(matte agents, thermal transfer printing **inks** and receptors contg. release agents and)

IT Inorganic compounds  
RL: USES (Uses)  
(matte agents, thermal transfer printing receptors contg.)

IT Parting materials  
(**siloxanes**, thermal transfer printing **inks** and receptors contg. matte agents and)

IT **Siloxanes** and Silicones, uses  
RL: USES (Uses)  
(amino, releasing agent, thermal transfer printing receptors contg.)

IT Vinyl acetal **polymers**  
RL: USES (Uses)  
(butyrals, thermal transfer printing **inks**, contg. **dyes** and matte agents and release agents)

IT **Siloxanes** and Silicones, uses  
RL: USES (Uses)  
(di-Me, release agents, thermal transfer printing **inks** contg.)

IT Urethane **polymers**, uses  
RL: USES (Uses)  
(polyester-, thermal transfer printing receptors, contg. release agents and matte agents)

IT **Inks**  
(printing, thermal-transfer, contg. matte agents and release agents)

IT Printing, nonimpact  
(thermal-transfer, receptors, contg. matte agents and release agents)

IT 9003-08-1, Epostar S 12 9011-14-7, PMMA 25035-72-7 **26160-89-4**  
RL: USES (Uses)  
(matte agents, thermal transfer printing **inks** contg.)

IT 9002-88-4, Polyethylene 9003-53-6, Polystyrene **26160-89-4**,  
Epostar L15 126602-25-3, Fine Pearl PB 3000 139351-84-1, Epostar GP 90  
RL: USES (Uses)  
(matte agents, thermal transfer printing receptors contg.)

IT 150216-54-9  
RL: USES (Uses)  
(thermal transfer printing receptors, contg. release agents and matte agents)

L45 ANSWER 52 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1993:180121 CAPLUS  
DOCUMENT NUMBER: 118:180121  
TITLE: Durable image-bearing thermal-transfer receptor and its manufacture  
INVENTOR(S): Nakajima, Atsushi; Kawamura, Tomonori; Kitamura, Shigehiro; Koshizuka, Kunihiro  
PATENT ASSIGNEE(S): Konica Co., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
CODEN: JKXXAF

KOROMA EIC1700

DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

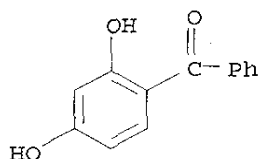
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04286689	A2	19921012	JP 1991-51714	19910315
PRIORITY APPLN. INFO.:			JP 1991-51714	19910315

AB The title receptor consists of a substrate successively coated with an image-accepting layer bearing an image, a UV-absorbing resin layer, and a UV-curable resin layer. The receptor is manufd. by imagewise thermally transferring heat-diffusive ink to the receiving layer of a receptor, coating on the receiving layer with the UV-absorbing resin and the UV-curable resin, and irradiating the coated receptor with UV.

IT 131-56-6, 2,4-Dihydroxybenzophenone  
 RL: USES (Uses)  
 (thermal-transfer recording receptor with UV-absorbing layer contg.)

RN 131-56-6 CAPLUS

CN Methanone, (2,4-dihydroxyphenyl)phenyl- (9CI) (CA INDEX NAME)



IC ICM B41M005-38

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST thermal transfer printing receptor preservation

IT Epoxy resins, uses  
 RL: USES (Uses)  
 (thermal-transfer recording receptor contg. UV-cured layer of)

IT Siloxanes and Silicones, uses  
 RL: USES (Uses)  
 (thermal-transfer recording receptor with image-accepting layer contg.)

IT Urethane polymers, uses  
 RL: USES (Uses)  
 (polyester-, thermal-transfer recording receptor with image-accepting layer contg.)

IT Printing, nonimpact  
 (thermal-transfer, sheets, with UV-curable resin layer)

IT 146024-88-6  
 RL: USES (Uses)  
 (thermal-transfer recording receptor contg. UV-cured layer of)

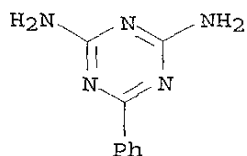
IT 131-56-6, 2,4-Dihydroxybenzophenone 37337-82-9, Vylon 200  
 RL: USES (Uses)  
 (thermal-transfer recording receptor with UV-absorbing layer contg.)

IT 9002-86-2, TK 300 25853-89-8, Ryuron QC 640 146899-57-2, Coronate  
HK-Vylon 290 copolymer  
RL: USES (Uses)  
(thermal-transfer recording receptor with image-accepting layer contg.)

L45 ANSWER 53 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1993:83017 CAPLUS  
DOCUMENT NUMBER: 118:83017  
TITLE: Thermal transfer recording sheet with lubricating layer  
INVENTOR(S): Fujii, Toshio; Kawai, Yutaka; Shimizu, Yoshio  
PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan  
SOURCE: Eur. Pat. Appl., 9 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 501486	A1	19920902	EP 1992-103381	19920227
EP 501486	B1	19961009		
R: DE, ES, FR, GB, IT				
JP 04272893	A2	19920929	JP 1991-33146	19910227
JP 3049792	B2	20000605		
CA 2061932	AA	19920828	CA 1992-2061932	19920226
US 5236768	A	19930817	US 1992-842519	19920227
PRIORITY APPLN. INFO.:			JP 1991-33146	A 19910227
AB	The title product prevents fusion to a thermal head and improves the running property of the thermal head by applying to a base film an ink layer to one side and a heat-resistant lubricating layer contg. modified silicone oil, with viscosity 600 cSt at 25.degree. and 400-1100 g/mol modifying group, to the other side of the base film. Thus, a lubricant coating contg. carboxy-modified silicone oil (viscosity 3353 cSt; carboxy 950 g/mol) 0.1, Kayarad DPHA, Ripoxy SP-1509 2.8, initiator 0.2, Et acetate 30, and iso-PrOH 15 parts was applied to PET base film of a thermal sheet and used for smooth thermal printing of color images.			
IT	87719-75-3, Polybenzoguanamine			
	RL: USES (Uses) (thermal recording sheet lubricant layer contg. modified silicone oil and, for smooth run in thermal head)			
RN	87719-75-3 CAPLUS			
CN	1,3,5-Triazine-2,4-diamine, 6-phenyl-, homopolymer (9CI) (CA INDEX NAME)			
CM	1			
CRN	91-76-9			
CMF	C9 H9 N5			



- IC ICM B41M005-40
- CC 42-11 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 74
- ST carboxylated silicone oil lubricant; thermal transfer sheet lubricating layer; heatproof silica lubricant recording sheet; recording sheet thermal transfer
- IT Lubricating oils  
(thermal recording sheet contg. modified silicone, for smooth run in thermal head)
- IT **Fluoropolymers**  
Polyimides, uses  
RL: USES (Uses)  
(thermal recording sheet lubricant layer contg. modified silicone oil and, for smooth run in thermal head)
- IT **Siloxanes and Silicones**, uses  
RL: USES (Uses)  
(alkoxy, thermal recording sheet lubricant layer contg., for smooth run in thermal head)
- IT **Siloxanes and Silicones**, uses  
RL: USES (Uses)  
(alkyl, thermal recording sheet lubricant layer contg., for smooth run in thermal head)
- IT **Siloxanes and Silicones**, uses  
RL: USES (Uses)  
(amino-contg., thermal recording sheet lubricant layer, for smooth run in thermal head)
- IT **Siloxanes and Silicones**, uses  
RL: USES (Uses)  
(carboxy-contg., thermal recording sheet lubricant layer contg., for smooth run in thermal head)
- IT **Siloxanes and Silicones**, uses  
RL: USES (Uses)  
(epoxy, thermal recording sheet lubricant layer contg., for smooth run in thermal head)
- IT Epoxy resins, uses  
RL: USES (Uses)  
(siloxane-, thermal recording sheet lubricant layer contg., for smooth run in thermal head)
- IT Printing, nonimpact  
(thermal-transfer, sheet contg. modified silicone oil, for smooth run in thermal head)
- IT 1317-33-5, Molybdenum disulfide, uses 1344-28-1, Alumina, uses 7440-44-0, Carbon, uses 7631-86-9, Silica, uses 9002-84-0, PTFE 13463-67-7, Titania, uses 14455-29-9, Aluminum carbonate

87719-75-3, Polybenzoguanamine

RL: USES (Uses)

(thermal recording sheet lubricant layer contg. modified silicone oil and, for smooth run in thermal head)

IT 125690-90-6

RL: USES (Uses)

(thermal recording sheet lubricant layer, contg. modified silicone oil, for smooth run in thermal head)

L45 ANSWER 54 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1992:653564 CAPLUS

DOCUMENT NUMBER: 117:253564

TITLE: Permanently luminous printing ink and its usage

INVENTOR(S): Liu, Tianzhang

PATENT ASSIGNEE(S): Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 4 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1059544	A	19920318	CN 1991-108902	19910911
PRIORITY APPLN. INFO.:			CN 1991-108902	19910911

AB Title silk **screen**-printable inks comprise resins (e.g., acrylic or polyurethane-alkyd resin mixt. varnishes) 50, T-based permanent luminescent powders 40-150, pigments 0.1-3, silicone oils 0.1-0.5, UV absorbers 0.1-0.5, Na lauryl sulfate 0.1-0.5, Al(OH)3 20-50, and EtOAc 2 parts.

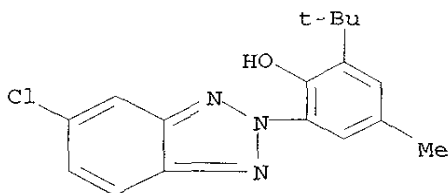
IT 3896-11-5, UV 326

RL: USES (Uses)

(permanent luminescent inks contg., for silk **screen** printing)

RN 3896-11-5 CAPLUS

CN Phenol, 2-(5-chloro-2H-benzotriazol-2-yl)-6-(1,1-dimethylethyl)-4-methyl-(9CI) (CA INDEX NAME)



IC ICM C09D011-10

ICS B41F015-00

KOROMA EIC1700

CC 42-12 (Coatings, Inks, and Related Products)  
 ST silk **screen** printing luminescent **ink**; tritium  
 permanent luminescent substance **ink**; UV absorber luminescent  
**ink**  
 IT Urethane **polymers**, uses  
 RL: USES (Uses)  
 (permanent luminescent **inks** contg. tritium substances and,  
 for silk **screen** printing)  
 IT **Siloxanes** and **Silicones**, uses  
 RL: USES (Uses)  
 (permanent luminescent **inks** contg., for silk **screen**  
 printing)  
 IT Acrylic **polymers**, uses  
 Alkyd resins  
 RL: USES (Uses)  
 (permanent luminescent **inks** contg., tritium substances and,  
 for silk **screen** printing)  
 IT **Inks**  
 (luminescent, permanent, tritium substance-contg., in silk  
**screen** printing)  
 IT 141-78-6, Acetic acid ethyl ester, uses 151-21-3, Sodium laurylsulfate,  
 uses 3896-11-5, UV 326 21645-51-2, Aluminum hydroxide, uses  
 RL: USES (Uses)  
 (permanent luminescent **inks** contg., for silk **screen**  
 printing)  
 IT 10028-17-8, Tritium, uses  
 RL: USES (Uses)  
 (permanent luminescent substances based on, for silk **screen**  
 printing **inks**)

L45 ANSWER 55 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1991:538400 CAPLUS  
 DOCUMENT NUMBER: 115:138400  
 TITLE: Sublimation dispersion **dye** receptive resin  
 compositions for thermal receiving sheets for thermal  
 printing  
 INVENTOR(S): Kushi, Kenji; Fujiwara, Tadayuki  
 PATENT ASSIGNEE(S): Mitsubishi Rayon Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 20 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 424037	A2	19910424	EP 1990-311191	19901012
EP 424037	A3	19930120		
EP 424037	B1	19960103		
R: DE, FR, GB, IT				
JP 03128961	A2	19910531	JP 1989-268396	19891016

JP 2838152	B2	19981216	
CA 2027622	AA	19910417	CA 1990-2027622 19901015
US 5218019	A	19930608	US 1992-895443 19920608
PRIORITY APPLN. INFO.:			JP 1989-268396 19891016
			US 1990-597877 19901012

AB In manufg. the title sheets with antiblock property is used a compn. of 100 parts mixt. of 40-95% unsatd. polyester resin and 5-60% crosslinking agent and 0.01-30 parts release agent of Si-functional or F-functional compds.; addnl. 1-10 parts benzotriazol UV stabilizers or hindered amines for fade resistance. Thus, 1 side of 125-.mu.m-thick Biafoil W-300 (polyester) was coated with a mixt. contg. dipentaerythritol hexaacrylate 3, dipentaerythritol pentaacrylate 4, dipentaerythritol tetraacrylate 3, 2,2-bis(4-acrylaryloxydiethoxyphenyl)propane 10, ethylene glycol-isophthalic acid-neopentyl glycol-sebacic acid-terephthalic acid copolymer (mol. wt. 20-25,000) 60, 1,4-butanediol-ethylene glycol-neopentyl glycol-isophthalic acid-sebacic-terephthalic acid copolymer (mol. wt. 15-20,000) 20, an acryloyloxy-terminated di-Me siloxane (mol. wt. 10,000) 9, 1-hydroxycyclohexylphenylketone 5, MEK 400, and PhMe 100 parts and cured under a 2 kW high pressure mercury lamp, giving a sheet with good antiblock properties, and no fading in 10 days exposure of 60.degree. and 60% relative humidity.

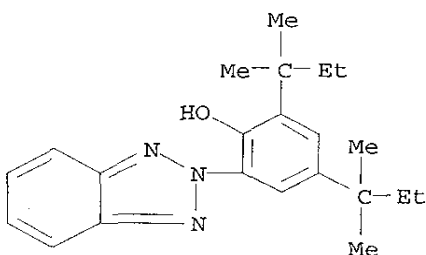
IT 25973-55-1, Tinuvin 328

RL: USES (Uses)

(UV stabilizer, for ink receiving sheet for thermal transfer printing)

RN 25973-55-1 CAPLUS

CN Phenol, 2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylpropyl)- (9CI) (CA INDEX NAME)



IC ICM B41M005-035

CC 42-11 (Coatings, Inks, and Related Products)

Section cross-reference(s): 74

ST unsatd polyester photocurable sheet; acrylic terminal siloxane photocurable; photocurable ink receiving layer; release layer siloxane photocurable; acrylate diluent photocurable polyester; thermal printing sheet photocurable receiver

IT Siloxanes and Silicones, compounds

RL: USES (Uses)

(di-Me, unsatd. group-terminal, polymers with unsatd.



polyesters, photocured, for ink receiving sheet for antiblock property)

IT Printing, nonimpact  
(thermal-transfer, receptor sheet for, contg. acrylic-siloxane layer for good antiblock property)

IT 25973-55-1, Tinuvin 328 41556-26-7, Sanol LS765  
RL: USES (Uses)  
(UV stabilizer, for ink receiving sheet for thermal transfer printing)

IT 117168-79-3D, polymer with acrylate-terminal siloxane  
135927-32-1D, polymer with acrylate-terminal siloxane  
136016-65-4D, polymer with amine or epoxy-modified siloxane 136019-13-1D, polymer with amine or epoxy-modified siloxane 136019-15-3D, polymer with amine or epoxy-modified siloxane 136044-68-3D, polymer with amine or epoxy-modified siloxane  
RL: USES (Uses)  
(in thermal transfer receptor sheet contg. layer of, with good antiblock property)

IT 25038-59-9, uses and miscellaneous  
RL: USES (Uses)  
(substrate, contg. layer of acrylic-siloxane, for ink receiving sheet for thermal printing)

L45 ANSWER 56 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1991:411075 CAPLUS  
DOCUMENT NUMBER: 115:11075  
TITLE: Nonaqueous inks for jet printing on heat-resistant substrates  
INVENTOR(S): Toyoda, Tsunehiko; Kunitatsu, Masaaki; Sugawa, Tetsuo  
PATENT ASSIGNEE(S): Dainippon Toryo Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03033172	A2	19910213	JP 1989-113225	19890502
JP 06021255	B4	19940323		

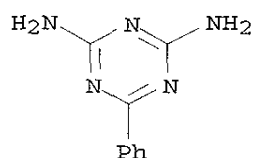
PRIORITY APPLN. INFO.: JP 1989-113225 19890502

AB The title inks for marking on heat-resistant substrates, e.g., ceramics and metals, contain solvent-sol. silicones, heat-resistant inorg. pigments with av. particle diam. .ltoreq.3 .mu.m, solvent-insol. resin particles with av. diam. .ltoreq.0.3 .mu.m, and solvents. Thus, a compn. contg. Pelgan D (silicone) 5, C.I. Pigment Blue 28 3, Epistar S 10, MEK 65, EtOCH2CH2OH 15.5, and Victoria Pure Blue 1 0.5 part was prepd. and filtered to give an ink showing no change during 1 mo of storage. A ceramic material was jet printed with the ink and calcined 15 min at 1500.degree. to give markings with good adhesion.

IT 26160-89-4, Epostar S  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in jet-printing inks, for marking heat-resistant substrates)  
RN 26160-89-4 CAPLUS  
CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA  
INDEX NAME)

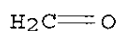
CM 1

CRN 91-76-9  
CMF C9 H9 N5



CM 2

CRN 50-00-0  
CMF C H2 O



IC ICM C09D011-00  
ICS C09D011-02  
CC 42-12 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 57  
ST jet printing ink nonaq; ceramic marking ink nonaq;  
pigment jet printing ink; silicone ink jet printing;  
heat resistance ink printing  
IT Siloxanes and Silicones, uses and miscellaneous  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in jet-printing inks, for heat-resistant substrates, Pelgan  
D)  
IT Aminoplasts  
Polyamides, uses and miscellaneous  
RL: TEM (Technical or engineered material use); USES (Uses)  
(in jet-printing inks, for marking heat-resistant substrates)  
IT Ceramic materials and wares  
(inks for marking of, jet-printing, heat-resistant)  
IT Siloxanes and Silicones, uses and miscellaneous  
RL: TEM (Technical or engineered material use); USES (Uses)  
(acrylic, in jet-printing inks, for heat-resistant  
substrates, RX 915)

KOROMA EIC1700

IT Heat-resistant materials  
 (inks, silicone-contg., for marking ceramic materials)

IT Inks  
 (jet-printing, silicone binders and inorg. pigments in, for heat resistance)

IT Acrylic polymers, uses and miscellaneous  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (siloxane-, in jet-printing inks, for heat-resistant substrates, RX 915)

IT 1308-38-9, C.I. Pigment Green 17, uses and miscellaneous 1309-37-1, C.I. Pigment Red 101, uses and miscellaneous 1345-16-0, C.I. Pigment Blue 28 24937-16-4, SP 500 (polyamide) 25038-74-8, Azacyclotridecan-2-one homopolymer 26160-89-4, Epostar S  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (in jet-printing inks, for marking heat-resistant substrates)

L45 ANSWER 57 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1991:45027 CAPLUS  
 DOCUMENT NUMBER: 114:45027  
 TITLE: Thermal-transfer printer ribbons  
 INVENTOR(S): Arita, Hitoshi; Takeda, Hideichiro; Suzuki, Takeo  
 PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02192996	A2	19900730	JP 1989-11672	19890120

PRIORITY APPLN. INFO.: JP 1989-11672 19890120

AB Backcoat of thermal-transfer ribbons consists of a heat-resistant layer contg. heat-resistant particles and binder, and a lubricating layer consisting of low-m.p. compds. that are melted by thermal head. These sheets provide high performance under adverse conditions, such as high thermal head pressure as in use for hand-held copier. Thus, a polyester film was coated with a compn. contg. poly(vinyl butyral) 22.6, melamin resin powder 67.8, Takenate D204 (polyisocyanate) 22.6, and Takenate A10 (polyisocyanate) 22.6 parts to form a heat-resistant layer. Then a layer of X22-5050B (silicone wax) was formed on the heat-resistant layer. The other side of PET film was coated with an ink compn. contg. paraffin wax, carnauba wax, polybutene, and carbon black. Obtained sheet was used as ribbon for hand-held copier, and produced clear image on paper and on overhead projector slide sheet without creasing or breakage.

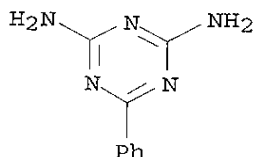
IT 26160-89-4, Melamin-formaldehyde copolymer  
 RL: USES (Uses)  
 (backcoat of thermal-transfer printer ribbon contg.)

RN 26160-89-4 CAPLUS  
 CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA INDEX NAME)

CM 1

CRN 91-76-9

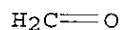
CMF C9 H9 N5



CM 2

CRN 50-00-0

CMF C H2 O



IC ICM B41M005-40

ICS B41M005-26

CC 42-2 (Coatings, Inks, and Related Products)

ST printer ribbon two layer backcoat; thermal transfer printing copier

IT Polyureas

RL: USES (Uses)

(backcoat of thermal-transfer printer ribbon contg.)

IT Siloxanes and Silicones, uses and miscellaneous

RL: USES (Uses)

(thermal-transfer printer ribbons with back layer of)

IT Printer ribbons

(thermal-transfer, for hand-held copier, backcoat of)

IT 14807-96-6, Talc, uses and miscellaneous 26160-89-4,

Melamin-formaldehyde copolymer 59459-00-6, Takenate A3

84593-77-1, Takenate A10 92529-53-8, Takenate D204 131438-66-9,

Thermolac M 116A

RL: USES (Uses)

(backcoat of thermal-transfer printer ribbon contg.)

IT 9002-88-4, Polyethylene

RL: USES (Uses)

(backcoat of thermal-transfer printer ribbons with layer of)

IT 124-26-5, Octadecanamide

RL: USES (Uses)

(coating of back of thermal-transfer printer ribbons with layer of)

L45 ANSWER 58 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1990:581488 CAPLUS

KOROMA EIC1700

DOCUMENT NUMBER: 113:181488  
 TITLE: Waterless presensitized lithographic plates with  
 photosensitive layer containing  
 polymer having polyorgaosiloxane  
 units  
 INVENTOR(S): Tomiyasu, Hiroshi; Kasakura, Akio; Goto, Sei; Suzuki,  
 Norihito  
 PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan; Konica Co.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02082245	A2	19900322	JP 1988-235182	19880920

PRIORITY APPLN. INFO.: JP 1988-235182 19880920

AB The title lithog. plates comprise an oleophilic polymer layer  
 and a photosensitive layer contg. a polymer having  
 polyorganosiloxane units in its side chains and a  
 photosensitive substance. The plates show good ink  
 -adhesion, scratch resistance, and printing durability. An Al plate was  
 coated with bisphenol A type epoxy resin and with a compn. contg.  
 dimethylpolysiloxane macromonomer-acrylonitrile-methacrylic  
 acid-Et acrylate graft copolymer and a diazo resin to give a  
 presensitized plate.

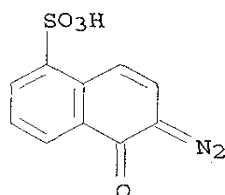
IT 68510-93-0  
 RL: USES (Uses)  
 (lithog. plate photosensitive layer contg.)

RN 68510-93-0 CAPLUS

CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, ester with  
 phenyl (2,3,4-trihydroxyphenyl)methanone (9CI) (CA INDEX NAME)

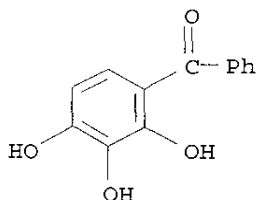
CM 1

CRN 20546-03-6  
 CMF C10 H6 N2 O4 S



CM 2

CRN 1143-72-2  
CMF C13 H10 O4



- IC ICM G03F007-004  
ICS G03F007-00; G03F007-075  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST waterless presensitized lithog plate; oleophilic polymer  
presensitized lithog plate; organo siloxane copolymer  
lithog plate  
IT Vinyl acetal polymers  
RL: USES (Uses)  
(lithog. plate oleophilic layer using)  
IT Lithographic plates  
(waterless, photosensitive layer, contg. polymer  
with polyorganosiloxane units)  
IT Epoxy resins, uses and miscellaneous  
RL: USES (Uses)  
(bisphenol A-based, lithog. plate oleophilic layer contg.)  
IT Siloxanes and Silicones, compounds  
RL: USES (Uses)  
(di-Me, graft copolymer with acrylic compds., lithog plate  
with photosensitive layer contg.)  
IT 68510-93-0  
RL: USES (Uses)  
(lithog. plate photosensitive layer contg.)  
IT 79-41-4D, copolymers with dimethyhsiloxanes, grafted  
107-13-1D, 2-Propenenitrile, copolymers with  
dimethyhsiloxanes, grafted 140-88-5D, copolymers with  
dimethyhsiloxanes, grafted  
RL: USES (Uses)  
(lithog. plate photosensitive layer using)

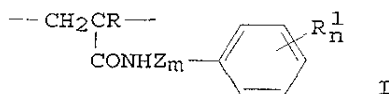
L45 ANSWER 59 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1990:523914 CAPLUS  
DOCUMENT NUMBER: 113:123914  
TITLE: Positive-working waterless lithographic plates  
comprising a photosensitive layer and a  
silicone rubber layer  
INVENTOR(S): Maeda, Yoshihiro  
PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan

KOROMA EIC1700

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02004253	A2	19900109	JP 1988-152497	19880621
PRIORITY APPLN. INFO.:			JP 1988-152497	19880621

GI

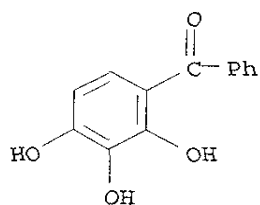


AB Pos.-working waterless presensitized lithog. plates have a silicone rubber layer on a substrate and, thereon, a **photosensitive** layer contg. an o-quinonediazide compd. and a **polymer** having 1-50 mol% of the structural unit I (R = H, Me; R<sub>1</sub> = alkyl, alkoxy; Z = alkylene; m = 0, 1; n = 0-5). The both layers show good adhesion to each other, and the plates exhibit good ink-repelling properties and ink -adhesion properties. Thus, SO 201 No.2 (polypropylene film) was coated with a compn. contg. N-phenylmethacrylamide-acrylonitrile-Me acrylate-Et acrylate-methacrylic acid **copolymer** and 1,2-naphthoquinonediazido(2)-5-sulfonic acid ester of 2,3,4-trihydroxybenzophenone and overcoated with a compn. contg. BY 16-801 (**polydimethylsiloxane**), methyltris(Me Et ketoxime)silane, and dibutyltin diacetate. The presensitized plate contg. the **photosensitive** layer and the rubber layer was imagewise exposed through a pos. and developed to give a waterless lithog. plate, which gave high quality prints from the initial stage of printing and showed good printing durability.

IT 1143-72-2D, 2,3,4-Trihydroxybenzophenone, ester with 1,2-naphthoquinonediazido(2)-5-sulfonic acid  
 RL: USES (Uses)  
 (photosensitive layer contg., in lithog. plate)

RN 1143-72-2 CAPLUS

CN Methanone, phenyl(2,3,4-trihydroxyphenyl)- (9CI) (CA INDEX NAME)



IC ICM G03F007-023  
ICS G03F007-00  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST waterless presensitized pos lithog plate; **photosensitive** quinonediazide compd lithog plate; acrylamide deriv **copolymer** presensitized plate  
IT Rubber, silicone, uses and miscellaneous  
RL: USES (Uses)  
(electrophotog. lithog. plate contg.)  
IT Lithographic plates  
(pos.-working, waterless, electrophotog. prepn. of, contg. quinonediazide and phenylacrylamide **copolymer**)  
IT 1143-72-2D, 2,3,4-Trihydroxybenzophenone, ester with 1,2-naphthoquinonediazido(2)-5-sulfonic acid 20546-03-6D, ester with 2,3,4-trihydroxybenzophenone  
RL: USES (Uses)  
(**photosensitive** layer contg., in lithog. plate)  
IT 129334-40-3, Acrylonitrile-ethyl acrylate-methacrylic acid-methyl acrylate-N-phenylmethacrylamide **copolymer** 129334-41-4, Acrylonitrile-ethyl acrylate-methacrylic acid-methyl methacrylate-N-phenylmethacrylamide **copolymer** 129334-42-5, Acrylonitrile-ethyl acrylate-ethyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-N-(3-methoxyphenyl)methacrylamide **copolymer** 129334-43-6, Acrylic acid-acrylonitrile-ethyl acrylate-N-(4-ethylphenyl)methacrylamide-N-(4-hydroxyphenyl)methacrylamide **copolymer**  
RL: USES (Uses)  
(**photosensitive** layer contg., in lithog. plate, prepn. of)

L45 ANSWER 60 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1990:100764 CAPLUS  
DOCUMENT NUMBER: 112:100764  
TITLE: Dispersing agents for solid particles in organic compounds  
INVENTOR(S): Canestri, Giuseppe  
PATENT ASSIGNEE(S): Italy  
SOURCE: Eur. Pat. Appl., 116 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1

KOROMA EIC1700



PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 328206	A2	19890816	EP 1989-200261	19890206
EP 328206	A3	19910703		

R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE

PRIORITY APPLN. INFO.: IT 1988-19392 19880212

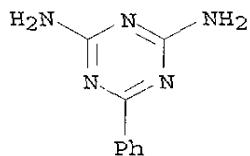
AB The title dispersants, useful in thermoplastics and liq. diluents (e.g. printing inks and coatings) have mol. wt. 2500-70,000 and are prepd. from reactive compns. at the limit of plastics and compns. of C8-20 aliph. hydroxy acids, OH- or COOH-terminated polybutadienes, and COOH-terminated polycaprolactones. Examples include .apprx.250 preps. and 511 dispersions of pigments, dispersants, and diluents.

IT 91-76-9D, reaction products with functional polymers

RL: USES (Uses)  
(dispersants, for pigments for inks and paints)

RN 91-76-9 CAPLUS

CN 1,3,5-Triazine-2,4-diamine, 6-phenyl- (9CI) (CA INDEX NAME)



IC ICM C08G081-00  
ICS B01F017-00; C09B067-00; C09D011-02; C09D017-00

CC 42-6 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 38

ST pigment dispersing agent; polybutadiene adduct dispersant;  
polycaprolactone adduct dispersant; hydroxy acid adduct dispersant

IT Alkyd resins  
RL: USES (Uses)  
(dispersants, for pigments for inks and prints)

IT Pigments  
(dispersion agents for, for paints and inks)

IT Rubber, butadiene, compounds  
RL: USES (Uses)  
(carboxy-terminated, reaction products, with functional polymers, dispersants for pigments)

IT Siloxanes and Silicones, compounds  
RL: USES (Uses)  
(di-Me, reaction products, with functional polymers, dispersants for pigments)

IT Polyimides, compounds  
RL: USES (Uses)  
(polyester-, reaction products, with functional polymers, dispersants for pigments)

KOROMA EIC1700

- IT Polyesters, compounds  
RL: USES (Uses)  
(polyimide-, reaction products, with functional polymers, dispersants for pigments)
- IT Inks  
(printing, dispersing agents for pigments in)
- IT Epoxy resins, compounds  
Fatty acids, compounds  
Polyamines  
Polyesters, compounds  
Resin acids and Rosin acids  
RL: USES (Uses)  
(reaction products, with functional polymers, dispersants for pigments)
- IT Fatty acids, compounds  
RL: USES (Uses)  
(tall-oil, reaction products, with functional polymers, dispersants for pigments)
- IT 77-99-6D, Trimethylolpropane, reaction products with functional polymers 79-10-7D, 2-Propenoic acid, reaction products with functional polymers 80-52-4D, reaction products with functional polymers 81-30-1D, Naphthalenetetracarboxylic dianhydride, reaction products with functional polymers 85-44-9D, 1,3-Isobenzofurandione, reaction products with functional polymers 89-05-4D, Pyromellitic acid, reaction products with functional polymers 91-76-9D, reaction products with functional polymers 92-87-5D, 4,4'-Diaminobiphenyl, reaction products with functional polymers 96-48-0D, reaction products with functional polymers 97-65-4D, Itaconic acid, reaction products with functional polymers 100-21-0D, 1,4-Benzenedicarboxylic acid, reaction products with functional polymers 105-60-2D, reaction products with functional polymers 106-14-9D, 12-Hydroxystearic acid, reaction products with functional polymers 107-15-3D, 1,2-Ethanediamine, reaction products with functional polymers 107-21-1D, 1,2-Ethanediol, reaction products with functional polymers 108-29-2D, reaction products with functional polymers 108-31-6D, 2,5-Furandione, reaction products with functional polymers 110-85-0D, Piperazine, reaction products with functional polymers 111-41-1D, reaction products with functional polymers 112-47-0D, 1,10-Decanediol, reaction products with functional polymers 115-69-5D, 2-Amino-2-methyl-1,3-propanediol, reaction products with functional polymers 115-77-5D, Pentaerythritol, reaction products with functional polymers 123-99-9D, Nonanedioic acid, reaction products with functional polymers 124-09-4D, 1,6-Hexanediamine, reaction products with functional polymers 128-69-8D, reaction products with functional polymers 141-22-0D, reaction products with functional polymers 141-82-2D, Propanedioic acid, reaction products with functional polymers 142-62-1D, Caproic acid, reaction products with functional polymers 514-10-3D, Abietic acid, reaction products

with functional **polymers** 556-67-2D, reaction products with functional **polymers** 629-11-8D, 1,6-Hexanediol, reaction products with functional **polymers** 693-23-2D, Dodecanedioic acid, reaction products with functional **polymers** 822-06-0D, reaction products with functional **polymers** 1122-58-3D, reaction products with functional **polymers** 1675-54-3D, reaction products with functional **polymers** 1740-19-8D, Dehydroabiatic acid, reaction products with functional **polymers** 1954-28-5D, Triethylene glycol diglycidyl ether, reaction products with functional **polymers** 2224-15-9D, reaction products with functional **polymers** 2421-28-5D, reaction products with functional **polymers** 2426-08-6D, Butyl glycidyl ether, reaction products with functional **polymers** 2432-99-7D, 11-Aminoundecanoic acid, reaction products with functional **polymers** 4097-89-6D, N,N-Bis(2-aminoethyl)-1,2-ethanediamine, reaction products with functional **polymers** 4767-03-7D, 2,2-Dimethylolpropanoic acid, reaction products with functional **polymers** 5698-29-3D, 2-Oxonanone, reaction products with functional **polymers** 6864-37-5D, 3,3'-Dimethyl-4,4'-diaminodicyclohexylmethane, reaction products with functional **polymers** 7209-38-3D, 1,4-Bis(3-aminopropyl)piperazine, reaction products with functional **polymers** 9002-98-6D, reaction products with functional **polymers** 10563-26-5D, N,N'-Bis(3-aminopropyl)ethylene diamine, reaction products with functional **polymers** 12624-35-0D, reaction products with functional **polymers** 13190-57-3D, reaction products with functional **polymers** 13827-62-8D, 2,6-Naphthalenedisulfonyl dichloride, reaction products with functional **polymers** 16803-97-7D, reaction products with functional **polymers** 21860-03-7D, 2,5-Di-tert-butylaniline, reaction products with functional **polymers** 25068-38-6D, reaction products with functional **polymers** 26603-36-1D, Benzenedimethanamine, reaction products with functional **polymers** 28631-79-0D, Aminoethylpiperazine, reaction products with functional **polymers** 36003-87-9D, reaction products with functional **polymers** 37348-52-0D, DEN 431, reaction products with functional **polymers** 39817-09-9D, Bisphenol F diglycidyl ether, reaction products with functional **polymers** 74913-72-7D, Polymin P, reaction products with functional **polymers** 111842-58-1D, reaction products with functional **polymers** 125523-32-2D, Escorez 8000, reaction products with functional **polymers** 125523-90-2D, Polymin G 10, reaction products with functional **polymers**

RL: USES (Uses)

(dispersants, for pigments for inks and paints)

IT 9003-17-2

RL: USES (Uses)

(rubber, carboxy-terminated, reaction products, with functional **polymers**, dispersants for pigments)

L45 ANSWER 61 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1989:564277 CAPLUS

DOCUMENT NUMBER: 111:164277

KOROMA EIC1700

TITLE: Light-sensitive printing plate for  
dry lithographic printing  
INVENTOR(S): Schlosser, Hans Joachim  
PATENT ASSIGNEE(S): Hoechst A.-G., Fed. Rep. Ger.  
SOURCE: Eur. Pat. Appl., 12 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 307776	A2	19890322	EP 1988-114587	19880907
EP 307776	A3	19900711		
EP 307776	B1	19930811		
R: DE, FR, GB				
DE 3731438	A1	19890330	DE 1987-3731438	19870918
US 4937169	A	19900626	US 1988-244479	19880915
JP 01101555	A2	19890419	JP 1988-232756	19880919
JP 2525467	B2	19960821		

PRIORITY APPLN. INFO.: DE 1987-3731438 19870918

AB Light-sensitive printing plates for prep. dry lithog.  
plates having a higher resistance to scratching and good developability  
and image resolu. are composed of a support, a light-  
sensitive layer, a printing ink-repelling silicone  
rubber inner layer, and a printing ink-repelling silicone rubber  
outer layer that is more strongly crosslinked than the inner layer. A  
treated Al support was coated with a diazonium salt-contg. light-  
sensitive layer, a silicon rubber soln. contg. a  
dimethylsiloxane with vinyl dimethylsiloxane end units,  
2-methyl-3-butyn-2-ol, a Pt complex of a vinylsiloxane and a  
mixed siloxane contg. trimethylsiloxane,  
methylhydrogensiloxane, and dimethylsiloxane units to  
give a 0.8 g/m<sup>2</sup> inner layer, and a silicone rubber soln. contg. a  
dimethylsiloxane with OH end groups, a  
methylhydrogensiloxane with trimethylsilyloxy end groups, and  
other additives to give a 2.8 g/m<sup>2</sup> outer layer. Upon exposure and  
development, a dry lithog. plate was obtained that was capable of  
producing 195,000 prints without showing any scratching.

IT 68510-93-0

RL: USES (Uses)

(dry lithog. plates with two silicon rubber layers and  
photosensitive layer contg., with improved resistance to  
scratching and developability and resolu.)

RN 68510-93-0 CAPLUS

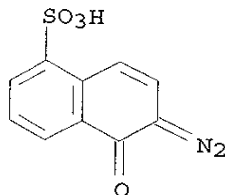
CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, ester with  
phenyl (2,3,4-trihydroxyphenyl)methanone (9CI) (CA INDEX NAME)

CM 1

CRN 20546-03-6

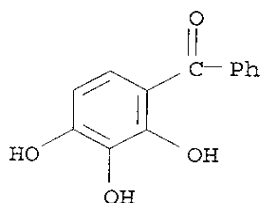
KOROMA EIC1700

CMF C10 H6 N2 O4 S



CM 2

CRN 1143-72-2  
CMF C13 H10 O4



- IC ICM G03F007-10  
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
ST dry lithog plate silicone rubber  
IT Rubber, silicone, uses and miscellaneous  
RL: USES (Uses)  
(dry lithog. plate with two layers of, for improved resistance to scratching and good developability and image resoln.)  
IT Siloxanes and Silicones, uses and miscellaneous  
RL: USES (Uses)  
(dry lithog. plates with **photosensitive** layer contg., with improved resistance to scratching and good developability and image resoln.)  
IT Siloxanes and Silicones, uses and miscellaneous  
RL: USES (Uses)  
(di-Me vinyl, dry lithog. plates with **photosensitive** layer contg., with improved resistance to scratching and good developability and image resoln.)  
IT Lithographic plates  
(dry-process, contg. two silicone rubber layers for high resistance to scratching and good developability and image resoln.)  
IT Phenolic resins, uses and miscellaneous  
RL: USES (Uses)  
(novolak, dry lithog. plates with two silicone rubber layers and

KOROMA EIC1700

- photosensitive layer contg., for improved resistance to scratching and good developability resoln.)
- IT 1067-33-0, Dibutyltin diacetate 2627-95-4D, 1,3-Divinyl-1,1,3,3-tetramethyldisiloxane, platinum complexes 7440-06-4D, Platinum, complexes with divinyltetramethyldisiloxane  
RL: USES (Uses)  
(dry lithog. plate with photosensitive layer and silicone rubber layer contg., for improved resistance to scratching and good developability and image resoln.)
- IT 2509-26-4D, reaction products with methoxydiphenylaminediazonium salt, acetylenesulfonate 25852-47-5 32445-12-8D, 3-Methoxydiphenylamine-4-diazonium, salts, reaction products with bismethoxymethyldiphenyl ether, phenylenesulfonates 68510-93-0 69432-41-3D, salt with bismethoxymethyldiphenyl ether-methoxydiphenyldiazonium salt reaction products  
RL: USES (Uses)  
(dry lithog. plates with two silicon rubber layers and photosensitive layer contg., with improved resistance to scratching and developability and resoln.)
- IT 9016-83-5, Cresol-formaldehyde copolymer  
RL: USES (Uses)  
(novolak, dry lithog. plates with two silicone rubber layers and photosensitive layer contg., for improved resistance to scratching and good developability resoln.)

L45 ANSWER 62 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1989:240248 CAPLUS

DOCUMENT NUMBER: 110:240248

TITLE: Waterless lithographic original plates with a photosensitive layer containing acrylic acid derivative copolymers

INVENTOR(S): Isono, Masanao; Taniguchi, Masaharu; Mori, Yoichi

PATENT ASSIGNEE(S): Toray Industries, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 63213849	A2	19880906	JP 1987-47317	19870302
JP 07101304	B4	19951101		

PRIORITY APPLN. INFO.: JP 1987-47317 19870302

AB A substrate is laminated successively with a photosensitive layer whose main constituent is an acrylic acid deriv. copolymer having quinonediazido and OH groups and an ink repelling layer to give a waterless lithog. original plate. The plate exhibits good image reproducibility and printing durability. Thus, an Al plate was coated with a compn. contg. a partially esterified product of 2-hydroxyethyl methacrylate-2-ethylhexyl acrylate copolymer with

KOROMA EIC1700

naphthoquinone-1,2-diazido-5-sulfonic acid chloride, 4,4'-diphenylmethane diisocyanate, and dibutyltin dilaurylate, heat-treated at 120.degree. for 2 min, then coated with a compn. contg. polydimethylsiloxane, vinyltris(Me Et ketoxime)silane, and .gamma.-aminopropyltriethoxysilane, and heat-treated. The plate was imagewise exposed through a neg. and developed to obtain a lithog. plate showing good printing durability.

IT 119756-88-6 120913-32-8

RL: USES (Uses)

(waterless lithog. plate photosensitive layer contg.)

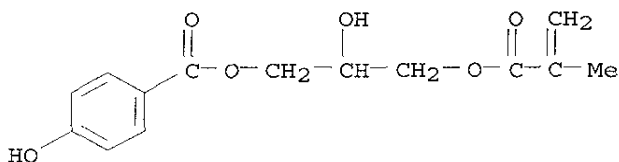
RN 119756-88-6 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with 2-[[[(6-diazo-5,6-dihydro-5-oxo-1-naphthalenyl)sulfonyl]oxy]ethyl 2-methyl-2-propenoate, 2-ethylhexyl 2-propenoate and 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 99148-58-0

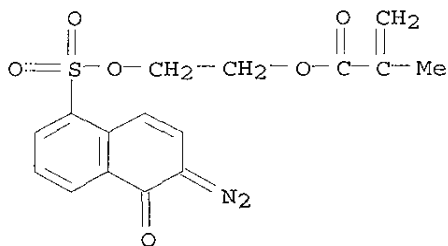
CMF C14 H16 O6



CM 2

CRN 54708-24-6

CMF C16 H14 N2 O6 S

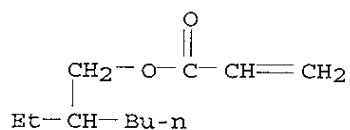


CM 3

CRN 103-11-7

KOROMA EIC1700

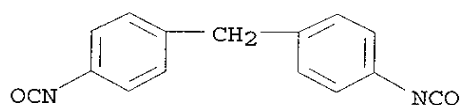
CMF C11 H20 O2



CM 4

CRN 101-68-8

CMF C15 H10 N2 O2



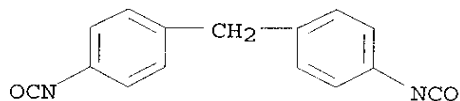
RN 120913-32-8 CAPLUS

CN Benzoic acid, 4-hydroxy-, 2-hydroxy-3-[(2-methyl-1-oxo-2-propenyl)oxy]propyl ester, polymer with dodecyl 2-methyl-2-propenoate, 6-diazo-5,6-dihydro-5-oxo-1-naphthalenesulfonate, polymer with 1,1'-methylenebis[4-isocyanatobenzene] (9CI) (CA INDEX NAME)

CM 1

CRN 101-68-8

CMF C15 H10 N2 O2



CM 2

CRN 120859-92-9

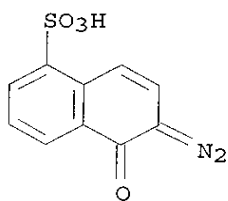
CMF (C16 H30 O2 . C14 H16 O6)x . x C10 H6 N2 O4 S

CM 3

CRN 20546-03-6

CMF C10 H6 N2 O4 S





CM 4

CRN 205639-47-0

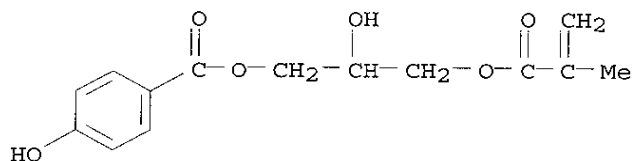
CMF (C16 H30 O2 . C14 H16 O6)x

CCI PMS

CM 5

CRN 99148-58-0

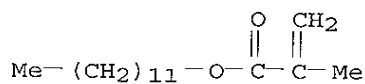
CMF C14 H16 O6



CM 6

CRN 142-90-5

CMF C16 H30 O2



IC ICM G03F007-02

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST lithog original plate **photosensitive** layer; acrylic acid deriv **copolymer** lithog; waterless lithog original plate; quinonediazido group **copolymer** lithog plate

IT **Siloxanes** and Silicones, uses and miscellaneous

RL: MOA (Modifier or additive use); USES (Uses)

(di-Me, crosslinking agent, for naphthoquinonediazidesulfonyl

KOROMA EIC1700

chloride-modified acrylate copolymer, waterless lithog. plate  
photosensitive layer contg.)

IT Lithographic plates  
(waterless, with photosensitive layer contg. quinonediazide  
sulfonate esters of hydroxyl group-contg. acrylic acid derivs., with  
good printing durability)

IT 2224-33-1  
RL: MOA (Modifier or additive use); USES (Uses)  
(crosslinking agent, for naphthoquinonediazidesulfonyl  
chloride-modified acrylate copolymer, waterless lithog. plate  
photosensitive layer contg.)

IT 119756-88-6 120859-98-5D, crosslinked with siloxanes  
120913-31-7 120913-32-8 120913-38-4  
RL: USES (Uses)  
(waterless lithog. plate photosensitive layer contg.)

L45 ANSWER 63 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1989:125581 CAPLUS

DOCUMENT NUMBER: 110:125581

TITLE: Thermal-transfer printing sheet with heat-resistant  
protective back layer

INVENTOR(S): Mizobuchi, Akira; Hida, Yoshiaki; Umise, Shigeki;  
Yamamoto, Kyoichi; Takahashi, Kyohei

PATENT ASSIGNEE(S): Dainippon Printing Co., Ltd., Japan

SOURCE: Can., 24 pp.  
CODEN: CAXXA4

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

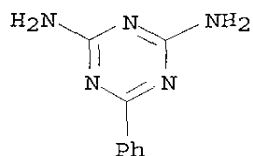
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CA 1240515	A1	19880816	CA 1985-497271	19851210
PRIORITY APPLN. INFO.:			CA 1985-497271	19851210
AB A thermal-transfer printing sheet comprises a base film coated with a hot-melt ink layer on 1 side and on the other side a heat-resistant protective layers comprising (1) a thermoplastic region having an OH or COOH group, a polyamine or polyisocyanate, and a different thermoplastic resin; or (2) a silicone-modified resin. Optionally the protective layer may contain a lubricant as a heat-releasing agent. The printing sheet has less of sticking and blocking problems. Thus, a PET film coated with an hot melt ink layer on 1 side and a compn. contg. acrylonitrile-styrene copolymer, TP-5000 (acrylpolyol), Teflon, and Mark FC-113 (polyethylene wax). Thermal-transfer printing with the above sheet produced no blocking of the head.				
IT 26160-89-4, Epostar S				
RL: USES (Uses) (thermal-transfer sheet with protective layer contg.)				
RN 26160-89-4 CAPLUS				
CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA INDEX NAME)				

CM 1

CRN 91-76-9

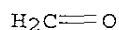
CMF C9 H9 N5



CM 2

CRN 50-00-0

CMF C H2 O



- IC ICM B41M005-26
- CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST thermal transfer printing blocking prevention; sticking prevention heat resistant protective layer
- IT Phospholipids, uses and miscellaneous  
RL: USES (Uses)  
(lubricants, thermal-transfer sheet with protective layer contg.)
- IT Phenolic resins, uses and miscellaneous  
RL: USES (Uses)  
(silicone-modified, thermoplastic, thermal-transfer sheet with protective layer contg.)
- IT Alkyd resins  
Fatty acids, compounds  
Fatty acids, esters  
Lecithins  
Polyesters, uses and miscellaneous  
RL: USES (Uses)  
(thermal-transfer sheet with protective layer contg.)
- IT Epoxy resins, uses and miscellaneous  
**Fluoropolymers**  
Polyethers, uses and miscellaneous  
Siloxanes and Silicones, uses and miscellaneous  
Urethane polymers, uses and miscellaneous  
RL: USES (Uses)  
(thermoplastic, thermal-transfer sheet with protective layer contg.)
- IT Amines, uses and miscellaneous

KOROMA EIC1700

RL: USES (Uses)

(poly-, thermal-transfer sheet with protective layer contg.  
thermoplastics and)

IT Printing, nonimpact

(thermal-transfer, sticking and blocking prevention in, heat-resistant  
protective layer for)

IT 91-08-7, Tolylene-2,6-diisocyanate 104-49-4, p-Phenylene diisocyanate  
117-81-7D, Dioctyl phthalate, silicone-modified 584-84-9 822-06-0  
2761-22-0, 4,4'-Biphenylene diisocyanate 3173-72-6, 1,5-Naphthalene  
diisocyanate 4998-28-1 7664-38-2, Phosphoric acid, uses and  
miscellaneous 9002-84-0, Lublon L 9002-86-2, Poly(vinyl chloride)  
9002-88-4, AF wax 9003-08-1 9003-08-1D, Formaldehyde-melamine  
copolymer, silicone-modified 9003-20-7, Poly(vinyl acetate)  
9003-22-9, Vinyl acetate-vinyl chloride copolymer 9003-54-7,  
Sebian N 9004-35-7, Cellulose acetate 9004-36-8, Cellulose acetate  
butyrate 9004-39-1, CAP 482-05 9004-57-3D, Ethyl cellulose,  
silicone-modified 9004-70-0, Nitrocellulose 9011-05-6D,  
Formaldehyde-urea copolymer, silicone-modified 9011-14-7,  
Thermolach M-116A 14807-96-6, Microace L-1, uses and miscellaneous  
24937-79-9, Vinylidene fluoride polymer 24981-14-4, Poly(vinyl  
fluoride) 25067-59-8, Poly(vinyl carbazole) 25656-78-4,  
Triphenylmethane triisocyanate 25684-76-8, Kynar 7201 26160-89-4  
, Epostar S 37337-02-3, Takenate D-110N 39278-79-0, Coronate L  
76806-35-4 82116-43-6, Thermolac U 230 83203-31-0, MOLD WIZ F-57  
92529-53-8, Takenate D-204 104783-18-8, Takelac XU 534TV 119411-67-5  
119466-61-4 119467-33-3, TP 5000

RL: USES (Uses)

(thermal-transfer sheet with protective layer contg.)

L45 ANSWER 64 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1989:31443 CAPLUS

DOCUMENT NUMBER: 110:31443

TITLE: Presensitized printing plate and method for preparing  
a printing plate for waterless lithography

INVENTOR(S): Herrmann, Heinz; Schlosser, Hans Joachim

PATENT ASSIGNEE(S): Hoechst A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 11 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3628719	A1	19880225	DE 1986-3628719	19860823
EP 257504	A2	19880302	EP 1987-111879	19870817
EP 257504	A3	19890201		
EP 257504	B1	19921223		
R: CH, DE, FR, GB, LI				
US 4842988	A	19890627	US 1987-87677	19870820
JP 63073253	A2	19880402	JP 1987-208392	19870824

KOROMA EIC1700

PRIORITY APPLN. INFO.:

DE 1986-3628719

19860823

AB A presensitized plate for the prodn. of waterless lithog. plates consists of a support, a radiation-sensitive layer contg. a compd. with .gtoreq.1 acid-cleavable COC bond, a compd. forming a strong acid upon irradiation, and a water-sol. binder, an interlayer from an amorphous silicic acid, formed by coating of an aq. silicic acid sol and drying, and an ink -repelling, hardened, silicone rubber layer. The plate shows improved adhesion between the radiation-sensitive layer and the silicone rubber layer. Thus, a brushed Al plate was coated with a soln. contg. a mixt. of cresol-HCHO copolymer and 2,3,4-trihydroxybenzophenone 1,2-naphthoquinone-2-diazide-5-sulfonates, 1,2-naphthoquinone-2-diazide-4-sulfonyl chloride, cresol-HCHO copolymer, crystal violet, and a THF-BuOAc-ethylene glycol mono-Me ether mixt. to give a photosensitive layer, a soln. contg. water, a 30% anionic silicic acid sol (Na<sub>2</sub>O amt. of 0.15% and a particle size of 25-30 nm), and polyethylene glycol nonylphenyl ether to give an interlayer, and with a soln. contg. an aliph. hydrocarbon mixt., a 33% soln. of dihydroxydimethylsiloxane in PhMe, vinyltriacetoxysilane, and dibutyltin diacetate and vulcanized to give a silicone rubber layer. The resultant plate was then imagewise exposed and developed to give a waterless lithog. plate.

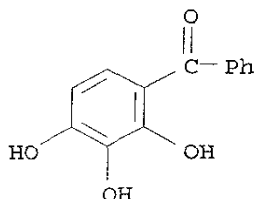
IT 1143-72-2, 2,3,4-Trihydroxybenzophenone 68510-93-0

RL: USES (Uses)

(presensitized waterless lithog. plate with amorphous silicic acid-contg. interlayer and silicon rubber layer and photosensitive layer contg., with improved adhesion)

RN 1143-72-2 CAPLUS

CN Methanone, phenyl(2,3,4-trihydroxyphenyl)- (9CI) (CA INDEX NAME)



RN 68510-93-0 CAPLUS

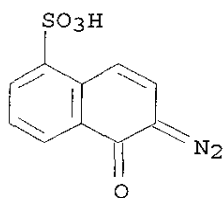
CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, ester with phenyl(2,3,4-trihydroxyphenyl)methanone (9CI) (CA INDEX NAME)

CM 1

CRN 20546-03-6

CMF C10 H6 N2 O4 S

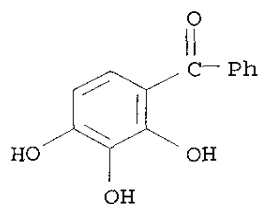
KOROMA EIC1700



CM 2

CRN 1143-72-2

CMF C13 H10 O4



IT 53050-67-2

RL: USES (Uses)

(waterless presensitized lithog. plates with amorphous salicylic acid acid-contg. interlayer and silicon rubber layer and photosensitive layer contg., with improved adhesion)

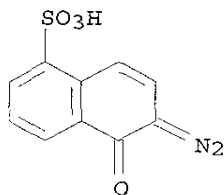
RN 53050-67-2 CAPLUS

CN 1-Naphthalenesulfonic acid, 6-diazo-5,6-dihydro-5-oxo-, diester with phenyl (2,3,4-trihydroxyphenyl)methanone (9CI) (CA INDEX NAME)

CM 1

CRN 20546-03-6

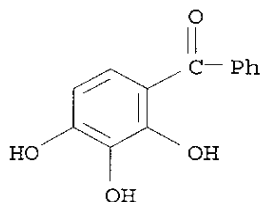
CMF C10 H6 N2 O4 S



CM 2

KOROMA EIC1700

CRN 1143-72-2  
CMF C13 H10 O4



- IC ICM G03F007-02  
ICS G03F007-08; G03F007-10
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST presensitized waterless lithog plate interlayer; amorphous silicic acid lithog plate; sol silicic acid lithog plate; silicic acid sol lithog plate
- IT Rubber, silicone, uses and miscellaneous  
RL: USES (Uses)  
(presensitized waterless lithog. plates with amorphous silicic acid interlayer and radiation-sensitive layer and layer of, with improved adhesion)
- IT **Siloxanes** and Silicones, uses and miscellaneous  
RL: USES (Uses)  
(waterless presensitized lithog. plates with amorphous silicic acid-contg. interlayer and **photosensitive** layer and layer contg., with improved adhesion)
- IT **Siloxanes** and Silicones, uses and miscellaneous  
RL: USES (Uses)  
(Me hydrogen, waterless presensitized lithog. plates with amorphous silicic acid-contg. interlayer and **photosensitive** layer and layer contg., with improved adhesion)
- IT Vinyl acetal **polymers**  
RL: USES (Uses)  
(butyrals, waterless presensitized lithog. plates with amorphous salicylic acid acid-contg. interlayer and silicon rubber layer and **photosensitive** layer contg., with improved adhesion)
- IT **Siloxanes** and Silicones, uses and miscellaneous  
RL: USES (Uses)  
(di-Me, presensitized waterless lithog. plates with amorphous silicic acid-contg. interlayer and **photosensitive** layer and silicone rubber layer contg., with improved adhesion)
- IT **Siloxanes** and Silicones, uses and miscellaneous  
RL: USES (Uses)  
(divinyl, waterless presensitized lithog. plates with amorphous silicic acid-contg. interlayer and **photosensitive** layer and layer contg., with improved adhesion)
- IT Phenolic resins, uses and miscellaneous  
RL: USES (Uses)

- (novolak, presensitized waterless lithog. plate with amorphous silicic acid-contg. interlayer and silicon rubber layer and **photosensitive** layer contg., with improved adhesion)
- IT Lithographic plates  
(waterless, presensitized, with interlayer contg. amorphous salicylic acid for improved adhesion of radiation-sensitive layer and silicon rubber layer)
- IT 548-62-9, Crystal violet 1143-72-2, 2,3,4-Trihydroxybenzophenone 9016-83-5, Cresol-formaldehyde **copolymer** 9016-83-5D, esters with naphthoquinone diazide sulfonic acid 36451-09-9 **68510-93-0**  
RL: USES (Uses)  
(presensitized waterless lithog. plate with amorphous silicic acid-contg. interlayer and silicon rubber layer and **photosensitive** layer contg., with improved adhesion)
- IT 78-08-0 78-10-4, Tetraethoxysilane 1760-24-3 2530-83-8 4130-08-9, Vinyl triacetoxysilane  
RL: USES (Uses)  
(presensitized waterless lithog. plates with amorphous silicic acid-contg. interlayer and **photosensitive** layer and silicon rubber layer contg., with improved adhesion)
- IT 75-75-2D, Methanesulfonic acid, salts with bismethoxymethyldiphenyl ether-methoxydiphenylamine diazonium sulfate-methylmethoxymethyldiphenyl ether reaction products 2481-94-9, Sudan yellow GGN 2509-26-4D, 4,4'-Bismethoxymethyldiphenyl ether, reaction products with methoxydiphenylamine diazonium sulfate and methylmethoxymethyldiphenyl ether, acetylene sulfonate 23121-00-8 28110-26-1 29377-89-7D, reaction products with bismethoxymethyldiphenyl ether and Me methoxymethyldiphenyl ether, acetylene sulfonate 33910-44-0 53050-67-2 73309-46-3, Victoria Pure Blue FGA 95524-26-8D, reaction products with bismethoxymethyldiphenyl ether and methoxydiphenylamine diazonium sulfate, acetylene sulfonate  
RL: USES (Uses)  
(waterless presensitized lithog. plates with amorphous salicylic acid acid-contg. interlayer and silicon rubber layer and **photosensitive** layer contg., with improved adhesion)

L45 ANSWER 65 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
ACCESSION NUMBER: 1987:587513 CAPLUS  
DOCUMENT NUMBER: 107:187513  
TITLE: Pressure-sensitive transfer material  
INVENTOR(S): Matsuhisa, Hirohide  
PATENT ASSIGNEE(S): Canon K. K., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62105685	A2	19870516	JP 1985-245708	19851101



PRIORITY APPLN. INFO.:

JP 1985-245708

19851101

AB The title material contains a pressure-sensitive transferrable ink layer formed on a film base and a release-type resin layer adhered with fine particles formed on the opposite side of the film base. The material restrains the back transfer of ink and shows good transferability and preservability. Thus, RB-106 (perfluoroalkyl acrylate polymer; surfactant) CCl<sub>2</sub>FCCLF<sub>2</sub>, and Epostar M (benzoguanamine; av. particle size 2 .mu.) were mixed to obtain a dispersion, which was applied onto the back side of a polypropylene film. Then, Polyimide S-52 (polyamide), PrOH, PhMe, liq. paraffin, and C black were mixed to obtain a dispersion, which was applied onto the surface of the film to form a pressure-sensitive transfer ink layer. The resulting material when used in an electronic typewriter gave clear prints.

IT 26160-89-4, Epostar M

RL: USES (Uses)

(pressure-sensitive transfer materials contg. fine particles of, for improved transferability and preservability)

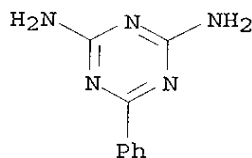
RN 26160-89-4 CAPLUS

CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA INDEX NAME)

CM 1

CRN 91-76-9

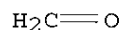
CMF C9 H9 N5



CM 2

CRN 50-00-0

CMF C H2 O



IC ICM B41M005-10

ICS B41J031-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST pressure sensitive transfer material preservability; perfluoroalkyl acrylate polymer transfer material; benzoguanamine resin layer transfer material; polyamide silicone layer transfer material

KOROMA EIC1700

IT Polycarbonates, uses and miscellaneous  
 Silica gel, uses and miscellaneous  
 RL: USES (Uses)  
 (pressure-sensitive transfer materials contg. fine particles of, for improved transferability and preservability)

IT Polyamides, uses and miscellaneous  
 RL: USES (Uses)  
 (pressure-sensitive transfer materials contg., for improved transferability and preservability)

IT Siloxanes and Silicones, uses and miscellaneous  
 RL: USES (Uses)  
 (alkyl, pressure-sensitive transfer materials with layer of)

IT Copying paper  
 (pressure-sensitive, with improved transferability and preservability)

IT 24936-68-3, Panlite K 1300, uses and miscellaneous 26160-89-4, Epostar M  
 RL: USES (Uses)  
 (pressure-sensitive transfer materials contg. fine particles of, for improved transferability and preservability)

IT 39316-78-4 84287-28-5, Polymide S-52  
 RL: USES (Uses)  
 (pressure-sensitive transfer materials contg., for improved transferability and preservability)

IT 110942-23-9  
 RL: USES (Uses)  
 (pressure-sensitive transfer materials with release layer contg., for improved transferability and preservability)

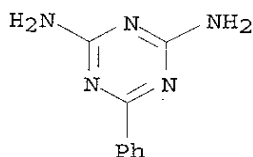
L45 ANSWER 66 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1987:497836 CAPLUS  
 DOCUMENT NUMBER: 107:97836  
 TITLE: Latex-coated resin microspheres  
 INVENTOR(S): Oka, Koichiro  
 PATENT ASSIGNEE(S): Toray Industries, Inc., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

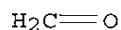
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 62059666	A2	19870316	JP 1985-199958	19850910
PRIORITY APPLN. INFO.:			JP 1985-199958	19850910

AB Microspheres prepd. by curing a cationic epoxy resin with an amine hardener in an aq. suspension and covering the particles with a latex polymer have good hydrophilicity, caking resistance, and flow properties and are useful in electrostatic printing toners, cosmetics, adhesives, inks, etc. Epikote 828 was cured with piperazine in an aq. emulsion to give 6-.mu. particles which were treated with SBR latex (Nipol LX410) to prepd. coated microspheres.

IT 26160-89-4  
 RL: USES (Uses)  
 (microspheres, **polymer** latex-coated, free-flowing)  
 RN 26160-89-4 CAPLUS  
 CN Formaldehyde, polymer with 6-phenyl-1,3,5-triazine-2,4-diamine (9CI) (CA  
 INDEX NAME)  
 CM 1  
 CRN 91-76-9  
 CMF C9 H9 N5



CM 2  
 CRN 50-00-0  
 CMF C H2 O



IC ICM C08L101-00  
 ICS C08G059-50; C08K009-04; D21H001-10; D21H003-48  
 CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 39  
 ST SBR coating epoxy microsphere; amine epoxy curing microsphere;  
 crosslinking amine epoxy microsphere  
 IT **Siloxanes** and Silicones, uses and miscellaneous  
 RL: USES (Uses)  
 (epoxy resin microspheres coated by, free-flowing)  
 IT Rubber, butadiene-styrene, uses and miscellaneous  
 RL: USES (Uses)  
 (epoxy resin microspheres covered by, free-flowing)  
 IT Epoxy resins, uses and miscellaneous  
 Polyamides, uses and miscellaneous  
 RL: USES (Uses)  
 (microspheres, **polymer** latex-coated, free-flowing)  
 IT Coating materials  
 (**polymer** latexes, on epoxy resin microspheres for free flow)  
 IT Spheres  
 (micro-, of epoxy resins, **polymer** latex-coated, free-flowing)  
 IT Phenolic resins, uses and miscellaneous

KOROMA EIC1700

RL: USES (Uses)  
 (novolak, microspheres, **polymer** latex-coated, free-flowing)  
 IT 9011-06-7  
 RL: USES (Uses)  
 (epoxy resin microspheres coated by Krehalon DO 813, free-flowing)  
 IT 9002-86-2, Poly(vinyl chloride) 24937-78-8, Sumikaflex 510 25085-46-5,  
 Ethylene-vinyl acetate-vinyl chloride **copolymer** 67254-76-6,  
 Nipol LX852  
 RL: USES (Uses)  
 (epoxy resin microspheres coated by, free-flowing)  
 IT 24937-16-4, Nylon 12 26160-89-4 31530-01-5 109759-68-4  
 110122-24-2  
 RL: USES (Uses)  
 (microspheres, **polymer** latex-coated, free-flowing)  
 IT 9003-55-8  
 RL: USES (Uses)  
 (rubber, epoxy resin microspheres covered by, free-flowing)

L45 ANSWER 67 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 1983:622441 CAPLUS

DOCUMENT NUMBER: 99:222441

TITLE: Original plate for dampening water-free lithography  
 and process for making printing plates using it

INVENTOR(S): Wada, Minoru; Tomita, Akira; Nishiwaki, Toshikazu;  
 Etoh, Kuniomi; Tanaka, Shinichi; Fugimura, Toshiaki;  
 Iguchi, Mitsuo

PATENT ASSIGNEE(S): Toyobo Co., Ltd., Japan

SOURCE: PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

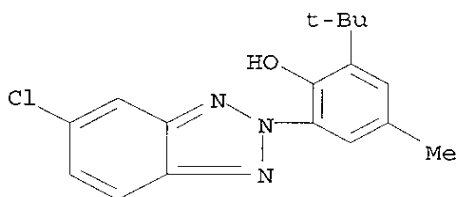
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8302175	A1	19830623	WO 1981-JP398	19811218
W: JP, US				
RW: DE, FR, GB				

PRIORITY APPLN. INFO.: WO 1981-JP398 19811218

AB A waterless lithog. plate consists of (1) a support, (2) an optional  
 adhesive substratum, (3) a **photosensitive** layer, (4) an  
**ink-repelling** layer contg. a metal atom having a principle quantum  
 no. .gtoreq.3 and a **siloxane** or a perfluoroalkyl compd. having a  
 functional group bound to the metal, and (5) an optional cover film.  
 Thus, an A1 plate was coated with an adhesive and antihalation compn.  
 contg. Vylon 20 S (Toyibo) resin, Coronate L, triethylenediamine, and  
 Tinuvin 326, a Printite EF type resin compn. (Toyobo) contg. a H2O-sol.  
**Nylon copolymer**, an acrylic monomer, and a **photopolymn**  
 . catalyst, and an **ink-repelling compn.** contg.  
 Cr(OH)Cl2, a carboxylic acid having **dimethylsiloxane** repeating  
 units (M.W. .apprx.3400), and iso-PrOH to give a lithog. plate original

which was then imagewise exposed by using a pos. film and processed to give a lithog. plate.

IT 3896-11-5  
 RL: USES (Uses)  
 (waterless lithog. plate with adhesive and antihalation layer contg.)  
 RN 3896-11-5 CAPLUS  
 CN Phenol, 2-(5-chloro-2H-benzotriazol-2-yl)-6-(1,1-dimethylethyl)-4-methyl-  
 (9CI) (CA INDEX NAME)



IC G03F007-02; G03C001-00; C08G077-38  
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
 ST lithog plate waterless ink repellent; siloxane metal ink repellent lithog; perfluoroalkyl metal ink repellent lithog; chromium siloxane ink repellent lithog  
 IT Photoimaging compositions and processes  
 (contg. metals bound to org. siloxanes or perfluoroalkyl compds., for waterless lithog. plate fabrication)  
 IT Polyamides, uses and miscellaneous  
 RL: USES (Uses)  
 (water-sol., waterless lithog. plate with photosensitive layer contg.)  
 IT Perfluorocarbons  
 RL: USES (Uses)  
 (waterless lithog. plate with ink-repelling layer contg.)  
 IT Siloxanes and Silicones, uses and miscellaneous  
 RL: USES (Uses)  
 (di-Me, waterless lithog. plate with ink-repelling layer contg.)  
 IT Lithographic plates  
 (waterless, with ink-repelling layer contg. metals bound to org. siloxanes or perfluoroalkyl compds.)  
 IT 280-57-9 3896-11-5 39278-79-0 82458-21-7  
 RL: USES (Uses)  
 (waterless lithog. plate with adhesive and antihalation layer contg.)  
 IT 555-75-9 3087-36-3 7429-90-5, uses and miscellaneous 7439-89-6, uses and miscellaneous 7439-98-7, uses and miscellaneous 7440-32-6, uses and miscellaneous 7440-33-7, uses and miscellaneous 7440-47-3, uses and miscellaneous 7440-62-2, uses and miscellaneous 7440-67-7, uses and miscellaneous 14982-80-0 18017-14-6 37382-64-2  
 RL: USES (Uses)  
 (waterless lithog. plate with ink-repelling layer contg.)

IT 79-10-7, uses and miscellaneous 3524-62-7 15625-89-5 30231-49-3  
 RL: USES (Uses)  
 (waterless lithog. plate with **photosensitive** layer contg.)

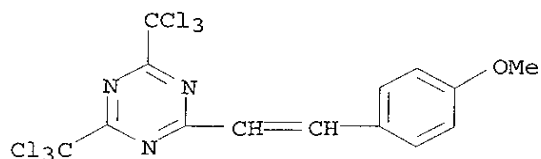
L45 ANSWER 68 OF 68 CAPLUS COPYRIGHT 2003 ACS on STN  
 ACCESSION NUMBER: 1981:471055 CAPLUS  
 DOCUMENT NUMBER: 95:71055  
 TITLE: Driographic printing plate  
 INVENTOR(S): Ball, Alan  
 PATENT ASSIGNEE(S): Minnesota Mining and Mfg. Co., USA  
 SOURCE: U.S., 10 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4225663	A	19800930	US 1974-500385	19740826
PRIORITY APPLN. INFO.:			US 1974-500385	19740826

AB A durable planog. driog. printing plate consists of a support having a highly adhesive layer thereon which is capable of repelling also **ink** when dry, and photobonded to the adhesive layer in image areas an oleo-**ink** receptive **polymer** layer. Photobonding occurs during imaging of the plate by including within the adhesive layer ethylenically unsatd. groups which are **copolymerizable** with a **light-sensitive** ethylenically unsatd. free radical initiated **photopolymerizable** material which provides the **ink** receptive image areas upon exposure. The resulting plates have a durable **ink** receptive image area and a press life superior to prior driog. printing plates. Thus, a 5 mil Al sheet was cleaned and then coated at 6 g/m2 (dry) with a soln. contg. Sylbfff 23 10, A 174 2.5, dibutyltin dilaurate 0.18, A 297 0.1, and xylene 50 parts. This coating was then air dried and cured by heating at 90-100.degree. for 10 min and then overcoated with a soln. contg. Elvacite 2013 5.0, trimethylolpropane triacrylate 2.8, 6-(4-methoxystyryl)-2,4-bis(trichloromethyl)-s-triazine 0.15, FC 431 0.1, and PhMe 40 parts. After drying, the plate was exposed in a vacuum frame through a neg. for 45 s to a Hg arc lamp, developed with 2-PrOH, dried, and used in an offset press with driog. **ink** to product >2000 impressions having a clear background.

IT 42573-57-9  
 RL: USES (Uses)  
 (driog. printing plates with **ink**-receptive layers contg., **photopolymerizable**)

RN 42573-57-9 CAPLUS  
 CN 1,3,5-Triazine, 2-[2-(4-methoxyphenyl)ethenyl]-4,6-bis(trichloromethyl)-(9CI) (CA INDEX NAME)



- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic Processes)
- ST silicone driog printing plate **photopolymer**
- IT Surfactants  
Acrylic **polymers**, uses and miscellaneous  
RL: USES (Uses)  
(driog. printing plates with **ink**-receptive layers contg., **photopolymerizable**)
- IT **Siloxanes** and Silicones, uses and miscellaneous  
**Siloxanes** and Silicones, uses and miscellaneous  
RL: USES (Uses)  
(driog. printing plates with **ink**-repellent layers contg.)
- IT Printing plates  
(driog., **photopolymerizable** compns. for fabrication of, with improved durability)
- IT Vinyl compounds, **polymers**  
RL: USES (Uses)  
(**polymers**, driog. printing plates with **ink**-receptive layers contg., **photopolymerizable**)
- IT 509-34-2 2867-47-2 3290-92-4 4986-89-4 12707-52-7 12767-79-2  
13463-67-7, uses and miscellaneous 25608-33-7 25609-89-6 40220-08-4  
42573-57-9 64472-92-0 76416-10-9  
RL: USES (Uses)  
(driog. printing plates with **ink**-receptive layers contg., **photopolymerizable**)
- IT 80-62-6 2530-85-0 7631-86-9, uses and miscellaneous 69882-18-4  
RL: USES (Uses)  
(driog. printing plates with **ink**-repellent layers contg.)